CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The world today is shaken by ecological challenges such as global warning, dwindling non-renewable natural resources, scarcity and lack of good water, and other man-made dangers (Herrmann, 2007). These ecological challenges have become a major concern to the international environmental governance institutions. Strategies of how to address these ecological challenges has been the major topic of discussion in international conferences. Following the debates on strategies to address these ecological (environmental) problems, the issue of sustainability has been brought forward.

Sustainability is a development that meets human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations (World Commission on Environment and Development in Saxena and Khandelwal, 2010). Hasna (2007) defined sustainability as a process which tells of a development of all aspects of human life affecting sustenance. It means resolving the conflict between the various competing goals, and involves the simultaneous pursuit of economic prosperity, environmental quality and social equity.

Certainly the idea of sustainable development has become increasingly popular in the contemporary world. It has continued to evolve as that of protecting the world's resources while its true agenda is to control the world's resources. Realizing that the society is the primary beneficiary of any attempts at sustainable development, individuals will have to readjust their level of consumption and realign the satisfaction of needs with the more environmentally friendly options that industries would offer. This means that every citizen as a consumer has a role to play in achieving sustainable development. In other words, sustainable consumption must be encouraged in order to achieve environmental sustainability.

Sustainable consumption is consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural system (Birtwistle & Moore in Dimitrova, 2010). Promoting sustainable consumption is equally important to limit negative environmental and social externalities as well as to provide markets for sustainable products (Organization for Economic Co-operation and Development, 2008). Consumers are the keys to drive sustainable production and play a central role in sustainable development. The consumers who are socially responsible and who see environmental

protection as key in their consumption experience is regarded as green consumers (Ibok and Etuk, 2014). That is why they are often described as environmental friendly consumers. These consumers see the environment as worth being sustainable and they translate this into their consumption behaviour by buying or consuming biodegradable or recyclable products that will not litter or pollute the environment; thereby preserving the environment for the future (Ibok and Etuk, 2014).

Sustainable consumption was firmly established on the Global Governance Agenda in the course of the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. Agenda 21, specifically its fourth chapter, called for the adoption of sustainable consumption patterns. Sustainable consumption brings together a number of key issues, such as meeting needs, enhancing the quality of life, improving resource efficiency, increasing the use of renewable energy sources, minimizing waste, taking a life cycle perspective and taking into account the equity dimension (Young, 2010). Integrating these component parts is the central question of how to provide the same or better services to meet the basic requirements of life and the aspirations for improvement for both current and future generations, while continually reducing environmental damage and risks to human health.

The major issue of sustainable consumption is the extent to which necessary improvements in environmental quality can be achieved through the substitution of more efficient and less polluting goods and services (patterns of consumption), rather than through reductions in the volumes of goods and services consumed (levels of consumption) (Lorek & Fuchs, 2013). Political reality in democratic societies is such that it will be much easier to change consumption patterns than consumption volumes, although both issues need to be addressed (Fuchs & Lorek, 2004).

Underlying the current debate on sustainable consumption is a growing awareness that reforms in national economic policies are required to ensure that goods and services reflect environmental costs and so stimulate more sustainable production and consumption patterns. According to Young (2010), sustainable consumption targets everyone, across all sectors and all nations, from the individual to governments and multinational conglomerates. It requires a multidisciplinary and multinational approach. However, if sustainable consumption is to be achieved, then it will become increasingly necessary for companies to practice green marketing.

Green marketing concept emerges from societal marketing (Kotler, 2009). Green marketing is an attempt to characterize a product as being

environmental friendly. It holds the view that marketing which is a part of business activities not only has to satisfy customers in particular, but also has to take into account the interests of society in general. In other words, green marketing is a business practice that takes into account consumer concerns about promoting preservation and conservation of the natural environment (Singh & Pandey, 2012). It incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising

Green marketing campaigns highlight the superior environmental protection characteristics of a company's goods and services. The sorts of characteristics usually highlighted include such things as reduced waste in packaging, increased energy efficiency of the product in use, reduced use of chemicals in farming, or decreased release of toxic emissions and other pollutants in production. In developed countries like America where consumers demand for products that are environmentally friendly, marketers have responded to growing consumer demand for environmental friendly products.

Indeed, green marketing has been recognized as a means for encouraging sustainable consumption and achieving environmental sustainability. Sustainability is the core issue that brought about the concept of green marketing and sustainable consumption. Promoting sustainable

consumption and production are important aspects of sustainable development, which depends on achieving long-term economic growth that is consistent with environmental and social needs (OCED, 2008). Bancheva (2009) posited that green marketing gives alternative scenario which is based on different food consumption patterns and lifestyle and energy mixes that could close the gap between ecological footprint and bio-capacity. It is against this back drop that this study seeks to examine the relationship between green marketing and sustainable consumption in the South-South region of Nigeria.

1.2 Statement of the Problem

One of the major challenges confronting Nigeria as a nation is how to encourage sustainable consumption so as to achieve environmental sustainability. Most of the consumers in Nigeria do not have the policy of patronizing only environmental friendly products. Many consumers are just desperate in meeting their needs and enhancing their quality of life without attaching importance to the preservation of the environment. These consumers do not take into account the equity dimension of sustainable consumption by ensuring a balance between meeting needs and preserving the environment. The environment has been jeopardized following the increasing waste and decreasing use of renewable energy sources (Ibok and Etuk, 2014).

Some consumers feel that the cost of environmental responsive products is too high and as such they prefer to maintain their unsustainable consumption patterns (Ongisa, 2013). The implication of these consumption patterns include destroying the environment; depleting stocks of natural resources; distributing resources in an inequitable manner; contributing to social problems such as poverty; and hampering sustainable development efforts.

It is believed that green marketing can be a vital tool for encouraging sustainable consumption in Nigeria. Although there are challenges surrounding the practice of green marketing in Nigeria due to lack of green consumers (unlike in developed countries like US, UK, Canada and Sweden where most of the citizens patronize only green products). Because most Nigerian consumers do not cultivate the habit of buying green products, many companies have continued to create environmental irresponsible products.

The United Nations Conference on Environment and Development (UNCED) as established in chapter 4 of the Agenda 21 (1992) recognized the need for green marketing as a means of encouraging sustainable consumption. Although many firms in the country claim to practice green marketing, Nigeria still suffers from dangerously high levels of air pollution, poor quality of water, high levels of garbage disposal and

rapidly diminishing space (Imafidon & Etuk, 2013). The key question now is: Is there any relationship between green marketing and sustainable consumption in the south-south region of Nigeria?

Although some studies have examined the relationship between green marketing and sustainable consumption (e.g. Fuchs & Lorek, 2004; Ongisa, 2013; Bancheva, 2009; Singh & Pandey, 2012); however, most of the studies conducted on green marketing and sustainable consumption were carried out in the developed countries while empirical studies that dealt on green marketing and sustainable consumption in south-south region of Nigeria are remarkably absent. It is in view to fill the gap in literature that prompted this study.

1.3 Objectives of the Study

The broad objective of this study was to examine the relationship between green marketing and sustainable consumption in the south-south region of Nigeria. From this broad objective, the following specific objectives were derived:

I. To ascertain the relationship between green products and sustainable consumption.
II. To determine the relationship between green pricing and sustainable consumption.

III. To ascertain the relationship between green promotion and sustainable consumption.

IV. To find out if there is any relationship between green distribution and sustainable consumption.

V. To examine the moderating effect of sustainability on the relationship between green marketing and sustainable consumption.

1.4 Research Questions

In order to adequately address the objectives of the study, the following research questions are put forward:

I. To what extent do green products encourage sustainable consumption?

II. To what extent does green pricing affect sustainable consumption?

III. To what extent does green promotion encourage sustainable consumption?

IV. To what extent does green distribution affect sustainable consumption?

V. To what extent does sustainability moderate the relationship between green marketing and sustainable consumption?

1.5 Formulation of Hypotheses

The following hypotheses are formulated and stated in their null form (Ho):

Ho_1: There is no significant relationship between green products and sustainable consumption in the south-south region of Nigeria.

Ho_2: There is no significant relationship between green pricing and sustainable consumption in the south-south region of Nigeria.

Ho_3: There is no significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria.

Ho_4: There is no significant relationship between green distribution and sustainable consumption in the south-south region of Nigeria.

Ho_5: Sustainability does not significantly moderate the relationship between green marketing and sustainable consumption in the south-south region of Nigeria.

1.6 Significance of the Study

The significance of this study cannot be overemphasized as it would serve useful purposes to different categories of persons, group of persons and organizations. First, this study would be of immense importance to business organizations in Nigeria as it would encourage them to embrace the concept of green marketing so as to enhance sustainable consumption in Nigeria.

The study will also be of immense benefits to top level management in business organizations in Nigeria as the study would broaden their knowledge on how green products, green pricing, green promotion and green distribution strategies can help to enhance sustainable consumption in Nigeria.

The result of this study would also be relevant to consumers in Nigeria as it would broaden their knowledge on the benefits of patronizing products that are environmentally friendly. The study would encourage Nigerians to be "green consumers" like other consumers in most developed countries.

Apart from the above, this study would fill the gap that exists in academic literature in this area of study. It is hoped that the study would serve as a good reference material for further studies in related areas. Efforts would be made to publish the study in educational journals for wider publicity to enhance the application of its findings.

1.7 Scope of the Study

This study was restricted to the South-South region of Nigeria. The South-South region of Nigeria is popularly known as Niger Delta region which consists of six (6) States namely; Akwa-Ibom State, Bayelsa State, Cross River State, Delta State, Edo State and Rivers State. Content wise,

the study focuses on green marketing and sustainable consumption. It covers the dimensions of green marketing such as green products, green pricing, green promotion, green distribution. The study concentrated on companies that produce recycling products such as plastic containers, packing bags, bottled waters, sachet water, papers, glass, and metals. The unit of analysis consisted of general managers, marketing directors and consumers. The consumers were made up of marketing professionals (Lecturers), NGOs, civil servants, labourers and market sellers. The opinions of these experts (respondents) were used to analyze the relationship between green marketing and sustainable consumption in the South-South region of Nigeria.

1.8 Limitations of the study

The researcher was confronted with some difficulties in the course of carrying out the research. First, the scarcity of literature within the African and particularly within the Nigerian context was a major limitation to this study as most of the empirical works on green marketing and sustainable consumption were done in developed countries.

Also, it was not easy to retrieve the completed questionnaire from the respondents especially general managers and marketing directors from the selected manufacturing companies in the South-South region

(marketers). Much effort through repeated calls and visits was necessary before this problem was overcomed. Even the marketing professionals (University lecturers) who represent consumers were not always on seat. Besides, visiting all the manufacturing companies to serve and retrieve the questionnaire were also a difficult task given the topography, land mass of South-South region as well as the time given to complete the research exercise. However, efforts were made to overcome these constraints and that is why this study was a success.

1.9 Operational Definition of Terms

The following terms are operationally defined as used in this study:

Green marketing: It consists of those activities designed to generate and facilitate any exchanges intended to satisfy human needs, such that the satisfaction of these needs and wants occur, with minimal detrimental impact on the natural environment.

Green products: Those products that are considered as being environment friendly.

Green pricing: A pricing system, which allows customers to pay a small premium in exchange for value added from environmental friendly products.

Green promotion: Those promotional activities with minimum negative impact on the environment.

Green distribution: A distribution system that promotes environmental sustainability.

Sustainable consumption: The consumption of goods and services that have minimal impact on the environment.

Sustainable development: A development that meets human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations.

Sustainability: A means to create and maintain conditions under which humans and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of the nation.

Economic sustainability: The use of various strategies for employing existing resources optimally so that a responsible and beneficial balance can be achieved over the longer term.

Social sustainability: An aspect of sustainable development which encompasses the idea that the future generations should have the same or greater access to social resources as current generation (inter-generation equity), while there should also be equal access to social resources within the current generation (intra-generational equity).

Socio-political sustainability: This is concerned with the physical and material standing of people and the state of their civic society. It could

also be defined as the pathways to durable social enrichment and development via the vibrancy and health of a society's political processes.

Cultural sustainability: It entails the promotion of cultural diversity and the preservation and conservation of tangible and intangible (local) cultural heritage.

Green consumers: These are consumers who are socially responsible and who see environmental protection as key in their consumption experience.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of this chapter was to support this study with earlier researches and related works in the area of green marketing and sustainable consumption, with the main thrust of discussing the nexus of those works with the present study. Accordingly, to enable the reader follow the researcher's train of thought, this chapter is organized in the following sub-themes:

- Conceptual Review
  - Green marketing
  - Sustainable consumption
  - Sustainability
- Historical Review
  - Historical background of green marketing
- Theoretical Review
  - Stages of green marketing
  - Some selected cases of green marketing practices
  - Forces behind the adoption of green marketing orientation
  - Green marketing mix
  - Dimensions of sustainability
  - Theories and approaches to sustainability
  - Demographic and economic determinants of sustainable consumption
  - Sustainable consumption and sustainable development
  - Green marketing and sustainable consumption.

- Relevant theories and models of green marketing and sustainable consumption.

- Empirical Review
  - Empirical studies on green marketing and sustainable consumption
  - Gap in theoretical and empirical review

2.1 Conceptual Review

2.1.1 Green Marketing

The term “green marketing” is not a simple task to define. Many people believe that green marketing refers solely to the promotion or advertising of products with environmental characteristics. Terms like Phosphate Free, Recyclable, Refillable, and Ozone friendly and environmental friendly are some of the things consumers believe are mostly associated with green marketing. While these terms are green marketing claims, in general, green marketing is a broader concept, one that can be applied to consumer goods as well as industrial goods and services.

The misconception of green marketing by many people makes its definition very critical. Indeed the terminologies and definitions used in this area are varied. The terminologies include; green marketing, environmental marketing and ecological marketing (Polonsky, 2004). Therefore, there is no universally accepted terminology and definition of green marketing up till now. For the purpose of this study the term green marketing will be used.

According to the American Marketing Association, green marketing refers to “the study of the positive and negative aspects of marketing activities on pollution, energy depletion and non-energy resource depletion” (Belz & Peattie, 2009:1). However, Herbig et al (2007) pointed out that green marketing refers “to products and packages that have one or more of the following characteristics; they are less toxic; are more durable; contain reusable materials and/or are made of recyclable materials”. These two definitions are narrow in scope as they focus on a narrow range of environmental issues. Green marketing needs to be broadly defined.

Mintu & Lozada (2008) made a broader definition of green marketing. They defined green marketing as “the application of marketing tools to facilitate exchanges that satisfy organizational and individual goals in such a way that the preservation, protection, and conservation of the physical environment are upheld”. Through this definition, Mintu & Lozada noted that green marketing goes beyond image building activities. The ecological concerns espoused by Henion & Kinnear (2006) would be integrated into the strategies, policies, and processes critical to the organization. More importantly, this definition of green marketing parallels what practitioners such as Coddington and Walter (2000) are embracing as “environmental marketing” – the marketing activities that

recognize environmental stewardship as a business development responsibility and business growth opportunity".

Thus, green marketing conveys a more proactive role for marketers. It fosters not only sensitivity to the impact that marketing activities may have on the natural environment, but also encourages practices that reduce or minimize any detrimental impact. This is why Polonsky (2004) defined green marketing as "consisting of all activities designed to generate and facilitate any exchanges intended to satisfy human needs, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment". This definition is much broader and incorporates much of the traditional components of the conventional marketing definition and also includes the protection of natural environment.

Green marketing is part of the new marketing approaches which do not just refocus, adjust or enhance existing marketing thinking and practice, but seeks to challenge those approaches and provides a substantially different perspective. In more detail, green, environmental or eco-marketing belong to the group of approaches which seek to address the lack of fit between marketing as it is currently practiced and the ecological and social realities of the wider marketing environment (Belz and Peattie, 2009). Pride and Ferrell (2010) conceptualized green

marketing as an organization's efforts at designing, promoting, pricing and distributing products that will not harm the environment. Welford (2000) defined "green marketing" as the management process responsible for identifying, anticipating and satisfying the requirements of customers and society, in a profitable and sustainable way.

Conceptual Framework

In this section, we develop the conceptual framework based on the hypotheses formulated with a view to fill the vacuum created in both theoretical and empirical reviews.

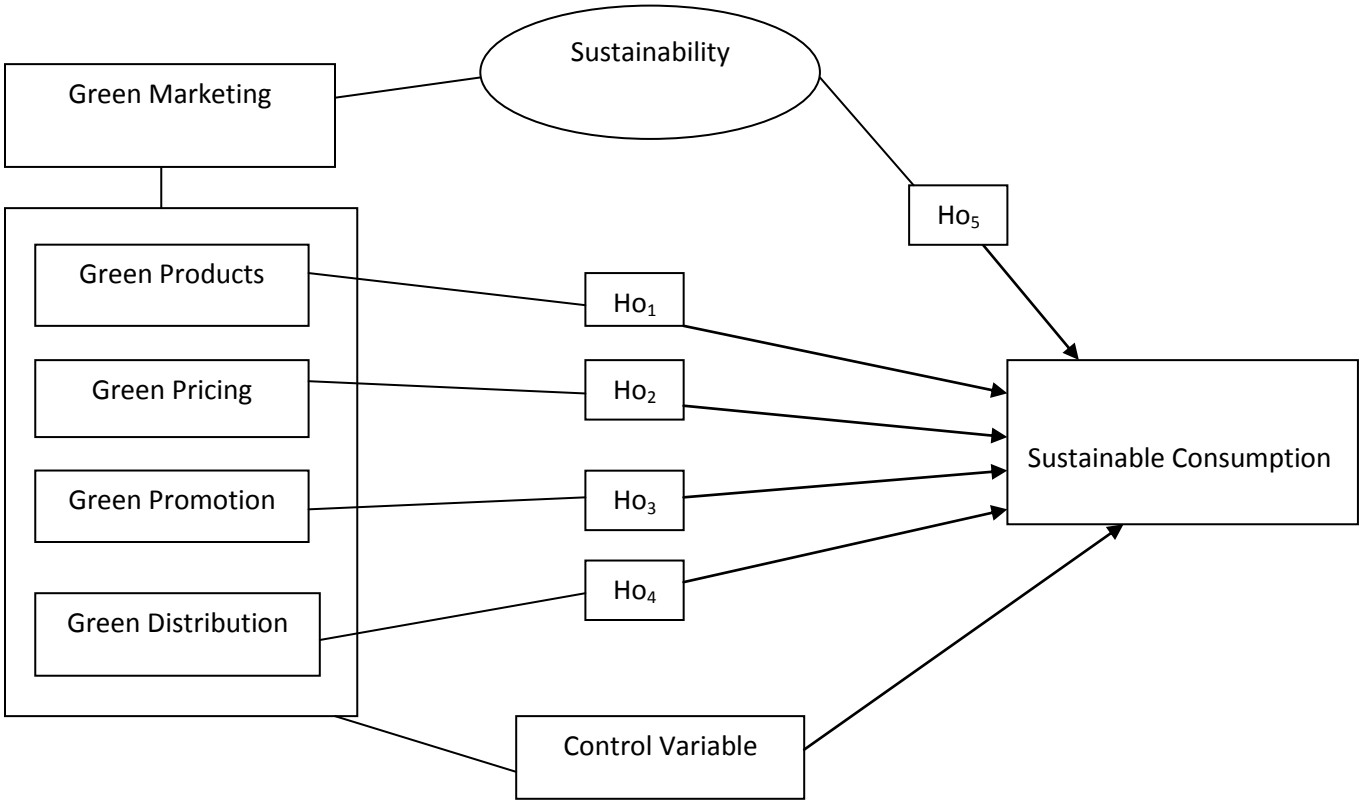

Fig. 1: Conceptual Framework

Source: Author's Conceptualization

Green Product

According to Sarkar (2012), green product refers to any product, which is not hazardous for environment and customer as well, and it also works as a future remedy of negative impact of a product. Kreidler & Joseph (2009) defined a green product as any product which is totally or partially created from recyclable or renewable materials. Laroch, Bergeron & Barbaro-Forleo (2001) identified the following characteristics of green products:

i. They are energy efficient and saving, durable and have low maintenance requirements.
ii. They incorporate recycled contents or have been salvaged from existing or demolished products for reuse.
iii. They do not contain highly toxic compounds and their production does not result in highly toxic-by-products.
iv. They can be easily reused either wholly or through disassembly.
v. They can be easily recycled preferably in a closed-loop recycling system.
vi. They are biodegradable.

According to Asongu (2000), consumers are increasingly looking for products that are not necessarily organic or natural, but address their

environmental consciousness. Sarkar (2012) stated that companies wanting to exploit emerging green market either:

i. Identify customers' environmental needs and develop products to address these needs.
ii. Develop environmentally responsible products to have less impact than competitors.

Whatever the product or service, it is vital to ensure that products meet or exceed the quality expectations of customers and is thoroughly tested. A producer should offer ecological products which not only must not contaminate the environment but should protect it and even liquidate existing environmental damages. Peatte (2007) noted that the ecological objectives in planning products are to reduce resource consumption and pollution, and to increase conservation of scarce resources.

Green Pricing

Holt & Holt (2004) defined green pricing as a pricing system, which allows customers to pay a small premium in exchange for value added from environmental friendly products. Most green products come with premium (high) prices, and most consumers are only prepared to pay additional value if there is a perception of extra product value. This value may be improved performance, function, design, visual appeal, or taste (Polonsky, 2004). Peattie (2005) noted that environmental benefits are

usually an added bonus but will often be the deciding factor between products of equal value and quality. Friedman (2007) added that environmentally responsible products are often less expensive when product life cycle costs are taken into consideration. Fuel-efficient vehicles, water-efficient printing and non-hazardous products are examples of products with additional value which consumers are willing to pay a small premium in exchange for value added (Alsmadi, 2007).

The old news is that green products don't work and consumers won't pay a premium for them, but the good news for businesses is that investment in environmentally preferred products and technologies can lead to a potent new source of innovation and competitive advantage pricing as a pricing system, which allows customers to pay a small premium in exchange for the value-added from environmental friendly products. Oilman (1998) posited that if you think your customer is not concerned about environmental issues, or won't pay a premium for products that are more eco-responsible, think again.

A study conducted by Stein and Koontz (2009) revealed that 67 percent of Americans are willing to pay 5-10 percent more for ecologically compatible products. By 1991, environmentally conscious individuals were willing to pay between 15-20 percent more for green products if

they believe the products are healthier, safe or better for the environment (Stein & Koontz, 2009).

In the green marketing mix model, Price is the only element that can create a perfect mix between the revenue and profit, whereas other elements create costs (Hakansson *et al*, 2005). Incentives by the Government in renewable energy and cheap prices by the electricity producers create demand for the green power. If electric supplier given value to price, he can capture a large share of green power in residential area (Glaser, 2009). Green marketing should take all these facts into consideration while charging a premium price.

Green Promotion

No area of green marketing has received as much attention as green promotion (Belz & Peattie, 2009). Green promotion is one of the critical aspects of green marketing. Uberoi (2007) defined green promotion as the promotional activities with minimum negative impact on the environment. Promotional activities such as commercial noise, high-pressure selling, overstating product features or performance, luring consumer to the store for a bargain that is out of stock or running rigged contests, and misleading labeling are all forms of promotional practices that cannot suffice in green marketing.

It is a commonplace in many Nigerian cities and towns today to see conventional advertisements in the form of bill boards, banners, posters, and handbills, particularly those relating to church programmes and political campaigns pasted on popular structures such as bridges, flyovers and buildings in areas of high traffic. These have become very untidy for environmental sustainability and improving quality of life, particularly when these materials are carried away by wind and dumped in filthy and muddy water on the road. Green promotion aimed at eliminating unwholesome promotional activities and stress on environmental sustainability and good quality of life (Imafidon & Etuk, 2013).

A smart company will be able to reinforce environmental credibility by using green promotional tools and practices. Many companies are using the electronic media such as the television and radio stations to promote their products for environmental reasons. For example, it was reported that most companies in the developed countries are using electronic media to promote their products instead of printing and pasting posters and bills on popular structures because they are considered to be very untidy for environmental sustainability (Sarkar, 2012).

Green Distribution

According to Zaman *et al* (2010), green distribution is a distribution system that promotes environmental sustainability. It requires that environmental promotion should be of almost priority in a firm's distribution system. The means of transportation used in distributing products must be of considerable interest to the firm (Mintu & Lozada, 2008). Smoking vehicles and trucks on our highways used in product distribution cause different forms of pollution to the environment and unhealthy living to the people (Imafidon & Etuk, 2013). The breakdown of vehicles used in transporting goods is another case in question (Sanjay & Gurmeet, 2004; Imafidon & Etuk, 2013). Green distribution therefore requires efficient distribution system with minimum harm on quality of life and environmental sustainability (Imafidon & Etuk, 2013).

2.1.2 Sustainable Consumption

Sustainable consumption is a concept which has been defined in different ways by different scholars and bodies. For instance, Ongisa (2013) defined sustainable consumption as the consumption of goods and services that have minimal impact on the environment. The Oslo Roundtable in 1994 defined sustainable consumption as the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the

lifecycle of the service or product so as not to jeopardize the needs of further generations (Ministry of Environment, 1994). This definition was adopted by the United Nations Commission on Sustainable Development (CSD) in 1995.

Vermeir & Verbeke in Dimitrova & Krystallis (2010:p2) stated that sustainable consumption is initiated by a decision making process that takes the consumer's social responsibility into account in addition to individual needs and wants. A number of actors, in particular NGOs have started working on the issue of sustainable consumption and developed a range of activities. Yet, the goals have remained unambitious and the (especially in industrialized countries) politically controversial aspects have been dropped fast from the agenda. According to UNEP, Chapter 4 remains the least implemented of the various chapters of Agenda 21 (Charkiewicz, van Bennekom & Young, 2001).

According to Daly (1998), moving towards sustainable consumption will require two developments: increases in the eco- efficiency of consumption (often via more efficient production patterns or an efficiency friendly design) and fundamental changes in consumption patterns and reductions in consumption levels in industrialized countries. The former aspect focuses on reducing resource consumption per consumption unit as a function of technological improvement, for instance. Thus, rather

than driving a car that needs 10 liters of gasoline per 100 kilometers, one may drive a car that will only use 3 liters. The latter aspect, however, is not a function of technological improvements but of changes in individual and societal behavior.

Fundamentally changing consumption patterns can mean, for example, going by train rather than by car. Reducing consumption levels can mean simply traveling less (far). These latter changes will be called strong sustainable consumption for short in the context of this study. It is these changes that are politically most controversial in industrialized countries, and yet those that need to happen if we want to achieve sustainable consumption. Indeed, it is those changes that focus on sustainable consumption rather than sustainable production or sustainable developments highlights (Princen, 2001).

Rather than approaching the issue of sustainable consumption in its breadth, i.e. taking on issues of eco-efficiency, of fundamental changes in consumption patterns, and of reductions in consumption levels, sustainable consumption so far has almost exclusively focused on questions of efficiency. Efficiency can be accepted by consumers as a good thing as the classical win-win solution. It certainly can be accepted by business, especially if combined with the raising of hopes for innovations that can sell.

The earliest "global" meetings on sustainable consumption, in particular the Oslo meeting in 1994 still defined a much more ambitious agenda for global sustainable consumption. It explicitly noted that a focus on eco-efficiency would not provide a sufficiently comprehensive framework for identifying, understanding and changing unsustainable consumption patterns. With time, however, focus and ambitions were systematically reduced. Even when the need for sufficiency is mentioned in (semi)official documents there are no ideas, tool or instruments how to reach it (Fuchs & Lorek, 2004). The main actors in the global sustainable consumption arena have been NGOs. NGOs and some national governments have been active as well, but the NGOs, in particular the Commission on Sustainable Development (CSD), 5 UNEP, and parts of the OECD are the ones that have been able to support global sustainable consumption in the official arenas. Understandably, much of their work has focused on developing the fundamentals: a common understanding of and framework for sustainable consumption, sustainable consumption indicators, and overviews of potential policy instruments and strategies. Unfortunately, much of their work has also lacked ambition to seriously pursue strong sustainable consumption.

2.1.3 Sustainability

Sustainability is a fashionable word in environmental conservation circles. It received its most popular exposition in the highly influential Brundtland report, in 1987 (World Commission on Environment and Development in Pearce et al, 2004). Though the concept of sustainability is of recent years, many scholars, practitioners, academicians and corporate bodies have defined this concept in various ways

Sustainability as per the report of the World Commission on Environment and Development (1987) can be viewed as "a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future" (Saxena & Khandelwal, 2010:1). According to Atkinson, Dietz and Neumayer (2009), sustainability is the form of development which aims at sustainable consumption and sustainable economic growth and tries to protect the environment.

Sustainability is indeed an eclectic concept, as a wide array of views fall under its umbrella. The concept has included notions of weak sustainability, strong sustainability and deep ecology (Agyeman, 2005). Different conceptions also reveal a strong tension between ecocentrism and anthropocentrism. Many definitions and images (Visualizing Sustainability) of sustainable development coexist. Broadly defined,

sustainability mantra enjoins current generations to take a systems approach to growth and development and to manage natural, produced, and social capital for the welfare of their own and future generations (Saha and Darnton, 2005).

Sustainability is a buzzword found in much environmental and some economics literature these days. Certainly the idea of sustainability has become increasingly popular in the contemporary world. The word sustainable has been used in too many situations today, and ecological sustainability is one of those terms that confuse a lot of people. We hear about sustainable development, sustainable growth, sustainable economies, sustainable societies, and sustainable agriculture. Everything is sustainable (Temple, 2002). Sustainability should be construed as economic growth that has been made more equitable and environmentally suitable. Schmidheiny (2002) alerts us to the illusive suggestion that sustainability is a chore for "developing" nations only: But development is more than growth or quantitative change. It is primarily a change in quality …. Sustainable development will command the greatest changes in the wealthiest nations, which consume the most resources, release the most pollution, and have the greatest capacity to make the necessary changes. Thus, we must start by first recognizing that growth is necessary to eliminate poverty, which leads to the plunder

of resources. With the cooperation of industrial nations and developing nations alike, worldwide development might proceed without risking constraint from overpopulation, resource depletion, and ecological breakdown.

However, the idea of sustainability is a complicated process (Temple, 2002). Industrial nations would have to shift from resource-intensive production systems and lifestyles to ones that consume vastly fewer resources and dramatically cut pollution. Developing nations would have to practice less destructive agriculture, industrialize with unprecedented care, and cut birth rates, with all that implies for improving women's rights. Governments in turn must keep up the pressure to comply with environmental standards that society at large can set as appropriate for a better quality of life.

The World Business Council for Sustainable Development (WBCSD) (2008) brings together some 200 international companies in a shared commitment to sustainable development through economic growth, ecological balance and social progress. Its members are drawn from more than 30 countries and 20 major industrial sectors. It gains benefits from a global network of about 60 national and regional business councils and partner organizations. According to WBCSD in Saxena & Khandelwal (2010):

> *Current global consumption patterns are unsustainable, based on the facts and trends outlined in their document; it is becoming apparent that efficiency gains and technological advances alone will not be sufficient to bring global consumption to a sustainable level; changes will also be required to consumer lifestyles, including the ways in which consumers choose and use products and services. We recognize the need for business to play a leadership role in fostering more sustainable levels and patterns of consumption, through current business processes such as innovation, marketing and communications, and by working in partnership with consumers, governments and stakeholders to define and achieve more sustainable lifestyles* (p282-283).

A 2008 survey by the National Geographic Society and GlobScan on consumer choice and the environment reported on current behaviour in fourteen countries (including Canada, China, France, Germany, India, Mexico, Russia, the UK and the US). The study found signs that consumers in all countries feel empowered when it comes to the environment and is taking some action in their daily lives to reduce consumption and waste. A global Synovate survey conducted in 2007 in association with Aegis, and repeated in 2008 in association with BBC World, also found that consumers in most countries are becoming more aware and willing to act on environmental concerns. The US had the largest rise of all, from 57% in 2007 to 80% in 2008. Chinese consumers also showed increased willingness to act on their concerns about climate change (Saxena & Khandelwal, 2010).

2.2 Historical Review

2.2.1 Historical Background of Green Marketing

The term Green Marketing came into prominence in the late 1980s and early 1990s. The proceedings of this workshop resulted in one of the first books on green marketing entitled "Ecological Marketing" (Henion and Kinnear, 1976). The Corporate Social Responsibility (CSR) Reports started with the ice cream seller Ben & Jerry's where the financial report was supplemented by a greater view on the company's environmental impact. In 1987 a document prepared by the World Commission on Environment and Development defined sustainable development as meeting “the needs of the present without compromising the ability of future generations to meet their own need”, this became known as the Brundtland Report and was another step towards widespread thinking on sustainability in everyday activity. Two tangible milestones for wave 1 of green marketing came in the form of published books, both of which were called Green Marketing. They were by Ken Peattie (1992) in the United Kingdom and by Jacquelyn Ottman (1993) in the United States of America (Wikipedia, 2014).

From an organizational standpoint, environmental considerations should be integrated into all aspects of marketing — new product development and communications and all points in between (Ottman, 1993). The

holistic nature of green also suggests that besides suppliers and retailers new stakeholders be enlisted, including educators, members of the community, regulators, and NGOs. Environmental issues should be balanced with primary customer needs (Wikipedia, 2014).

The past decade has shown that harnessing consumer power to effect positive environmental change is far easier said than done. The so-called "green consumer" movements in the U.S. and other countries have struggled to reach critical mass and to remain in the forefront of shoppers' minds (Dodds, 2006). While public opinion polls taken since the late 1980s have shown consistently that about 70% of consumers in the U.S. and elsewhere profess a strong willingness to favour environmentally conscious products and companies, consumers' efforts to do so in real life have remained sketchy at best (Dodds, 2006).

However, one of the major challenges of green marketing is the lack of standards or public consensus about what constitutes "green". In essence, there is no definition of "how good is good enough" when it comes to a product or company making green marketing claims. This lack of consensus by consumers, marketers, activists, regulators, and influential people has slowed the growth of green products because companies are often reluctant to promote their green attributes, and consumers are often skeptical about claims.

Despite these challenges, green marketing has continued to gain adherents, particularly in light of growing global concern about climate change. This concern has led more companies to advertise their commitment to reduce their climate impacts, and the effect this is having on their products and services (Nicola & Polonsky, 1995).

2.3 Theoretical Review

2.3.1 Stages of Green Marking Practices

Since 1980s, green marketing has undergone different stages. According to Lee (2008) cited in Ongisa (2013:p31), the first decade marked the first stage that was characterized by how environmental problems could be solved. During the second stage in 1990s, there was wide consumer cynicism that slowed down green marketing momentum (Peattie and Crane, 2005). According to the writers, there were five marketing practices which led to the failure of green marketing during this period. They are:

(1) **Green spinning**: Using public relations to deny or discredit the public's criticisms against the company's practices. This is mostly by industries in oil, chemicals and pharmaceuticals.

(2) **Green selling:** Taking an opportunistic approach by adding some green claims to existing products with the intention of increasing sales.

(3) **Green harvesting:** Becoming enthusiastic about the environment

only when going green could result in cost savings (energy and material input inefficiencies, package reductions, etc.).

(4) **Enviropreneur marketing:** Developing innovative green products to market without really understanding what the consumers actually want.

(5) **Compliance marketing:** Companies use simple compliance to environmental legislation to promote themselves as green firms.

Gradually, green marketing evolved into ethical consumerism (Uusitalo and Oksanen, 2004). Uusitalo and Oksanen (2004) cited in Ongisa (2013:p31) described ethical consumerism as buyer behaviour that reflects a concern with the problems that arise from unethical and unjust trades, such as child and low-paid labour, infringement of human rights, animal testing, labour union suppressions, inequalities in trading relations with the Third World and pollution of the environment. The demand for green products is uneven across different marketplaces (Peattie, 1992).

2.3.2 Some Selected Cases of Green Marketing Practices

Some cases of green marketing practices were identified across the globe. However, most of the cases were sorted from the United States of American, China and India; and they were classified into various sectors as shown below:

Phillips's "Marathon" CFL Lightbulb

Philips Lighting's first shot at marketing a standalone compact fluorescent light (CFL) bulb was Earth Light, at $15 each versus 75 cents for incandescent bulbs. The product had difficulty climbing out of its deep green niche. The company re-launched the product as "Marathon," underscoring its new "super long life" positioning and promise of saving $26 in energy costs over its five-year lifetime. Finally, with the U.S. EPA's Energy Star label to add credibility as well as new sensitivity to rising utility costs and electricity shortages, sales climbed 12 percent in an otherwise flat market (Fowler, 2002).

Car Sharing Services

Car sharing services address the longer-term solutions to consumer needs for better fuel savings and fewer traffic tie-ups and parking nightmares, to complement the environmental benefit of more open space and reduction of greenhouse gases. They may be thought of as a "time-sharing" system for cars. Consumers who drive less than 7,500 miles a year and do not need a car for work can save thousands of dollars annually by joining one of the many services springing up, including Zipcar (East Coast), I-GO Car (Chicago), and Hour Car (Twin Cities).

Electronics Sector

The consumer electronics sector provides room for using green marketing to attract new customers. One example of this is HP's promise to cut its global energy use 20 percent by the year 2010. To accomplish this reduction below 2005 levels, The Hewlett-Packard Company announced plans to deliver energy-efficient products and services and institute energy-efficient operating practices in its facilities worldwide.

Products and Services

Now companies are offering more eco-friendly alternatives for their customers. Recycled products for example, are one of the most popular alternatives that can benefit the environment. These benefits include sustainable forestry, clean air, energy efficiency, water conservation, and a healthy office. One example is the E-commerce business and office supply company Shoplet which offers a web tool that allows you to replace similar items in your shopping cart with greener products.

Introduction of CNG in Delhi

New Delhi, capital of India, was being polluted at a very fast pace until Supreme Court of India forced a change to alternative fuels. In 2002, a directive was issued to completely adopt CNG in all public transport systems to curb pollution.

2.3.3 Forces behind the Adoption of Green Marketing Orientation

According to Saxena and Khandelwal (2010), the adoption of a green marketing orientation by a firm is principally a response to the increased pressures by society for business to meet its comprehensive ethical and moral responsibilities, while adhering to the marketing concept's basic tenants as suggested by McCarthy and Perreault (1984) of meeting customer needs at a profit. Also, green marketing orientation may provide the organization with a strategic competitive advantage in both domestic and international markets. In many cases, mandatory environmental legislation is forcing behavioral changes in consumers.

According to Clarke (2004) cited in Saxena and Khandelwal (2010), business may adopt an eco-marketing orientation as a strategic response to the dynamic environments of the nineties. Rahbar and Walid (2011) cited in Ibok & Etuk (2014:49) identified five major reasons for going green which include:

1. The pressure from government.
2. The need to become socially responsible.
3. Pressures emanating from competitors.
4. The cost and profit issues and
5. The concern about opportunities and competitive advantage.

The basic ideas behind the adoption of a green marketing orientation dictate that corporations have responsibilities that go beyond the production of goods and services. These responsibilities according to Buchholz (1991) involve helping to solve important social problems, especially those they have helped create. In the United States, Corporations such as McDonald's, Wallmart, Procter & Gamble, and Du Pont acknowledge that the environment must be protected and enhanced for economic growth to take place, and have taken action towards that goal. McDonald's has made a $100 million commitment to its consumers for recycling purposes. Wallmart encourages the purchase of environmentally friendly products and reports that the green labeling program that they initiated in 1989 contributed to an overall 25% increase in sales for the year. Procter & Gamble has pledged to spend $20 million per year to develop a composting infrastructure, (Lodge and Rayport, in Saxena and Khandelwal, 2010).

It should be noted that company like Procter & Gamble in the United States has been under fire by environmentalists mostly for its disposable diapers and its detergents. As a response, Procter & Gamble has implemented a strategy that takes the concepts of recycling and reusing to heart, particularly regarding packaging. Still, they have discovered that the synergistic relationship between issues and trends can yield

criticism and consumer resistance. Even though their formula for Cheer laundry detergent (or Ariel outside of the U.S.) has been changed to minimize the amount of phosphates in the product, the company is still being strongly criticized for its overt reliance on animal testing. The Director of Global Sustainability, Procter & Gamble, Dr. Peter White, states that:

> *We need to connect sustainable production with sustainable consumption. This means understanding current and future consumption patterns, then harnessing innovation to develop more sustainable products, services and behavior change initiatives* (Saxena and Khandelwal, 2010).

2.3.4 Dimensions of Sustainability

The concept "sustainability" has in the past, been broken down into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability. More recently, it has been suggested that a more consistent analytical breakdown is to distinguish four domains of economic, ecological, political and cultural sustainability. This is consistent with the United Cites and Local Governments (UCLG) move to make 'culture' the fourth domain of sustainability. Other important sources refer to the fourth domain as 'institutional' (United Nations Commission on Sustainable Development, 1995), or as 'good governance (Leadership Council of the Sustainable Development Solutions Network, 2013). We shall explore each of these dimensions of sustainable development in details.

Environmental Sustainability

According to Hasna (2007), environmental sustainability is the process of making sure current processes of interaction with the environment are pursued with the idea of keeping the environment as pristine as naturally possible based on ideal-seeking behaviour. It involves making decisions and taking action that are in the interests of protecting the natural world, with particular emphasis on preserving the capability of the environment to support human life.

Environmental sustainability demands that society designs activities to meet human needs while indefinitely preserving the life support systems of the planet (Norton, 2005). This, for example, entails using water sustainably, only utilizing renewable energy, and sustainable material supplies (e.g. harvesting wood from forests at a rate that maintains the biomass and biodiversity).

An "unsustainable situation" occurs when natural capital (the sum total of nature's resources) is used up faster than it can be replenished (Dasgupta, 2007). Robinson (2004) added that sustainability requires that human activity only uses nature's resources at a rate at which they can be replenished naturally. Inherently the concept of sustainable development is intertwined with the concept of carrying capacity. Theoretically, the long-term result of environmental degradation is the

inability to sustain human life. Such degradation on a global scale should imply extinction for humanity.

Economic Sustainability

Economic sustainability is the term used to identify various strategies that make it possible to use available resources to their best advantage (Stavins et al, 2003). The idea is to promote the use of those resources in a way that is both efficient and responsible, and likely to provide long-term benefits. In the case of a business operation, it calls for using resources so that the business continues to function over a number of years, while consistently returning a profit.

In most scenarios, the measure of economic sustainability is presented in monetary terms (Solow, 2003). The worth of assets and resources in dollar figures is common, as is identifying the amount of return generated by the efficient use of those resources. The idea is to aid in identifying areas of the operation in which resources are not being utilized in the most efficient manner, and take the steps to correct the situation. At the same time, the proposed changes to the operation are considered in terms of their overall effect on the production flow, making it possible to address any potential difficulties later in the process before the changes are actually implemented. Doing so means engaging in a strategy known as cross-sectoral coordination, which involves identifying

what impact changes in one area of the operation will have on subsequent phases of the production process.

According to Throsby (2008), true sustainability encourages the responsible use of resources. This involves not only making sure that the business is making a profit, but that the operation is not creating environmental concerns that could cause harm to the balance of the local ecology. By being mindful of the impact of the operation on the local community, the business is able to choose raw materials that are more environmentally friendly and design a waste disposal strategy that does not cause damage. In the long run, attention to these types of details has the potential to increase the community's investment in the continued operation of the business, and improve its chances for remaining a viable operation for a longer period of time.

While the concept of economic sustainability is straightforward, there are potential obstacles that may be found in different companies. According to Drexhage and Mulphy (2010), resistance to change can often lead to a less than efficient use of available resources. A failure to track expenses and justify expenditures will also have adverse effects on the long-term stability of the company and limit the potential for sustainability. For this reason, companies sometimes work with outside consultants who can evaluate the business operation with relatively little bias and point

out what needs to be done to improve the sustainability of the operation. The goal is to establish profitability over the long term. A profitable business is much more likely to remain stable and continue to operate from one year to the next. From this perspective, this strategy can be seen as a tool to make sure the business does have a future and continues to contribute to the financial welfare of the owners, the employees, and to the community where it is located.

Socio-Political Sustainability

Socio-political sustainability concerns itself with the factors that affect the well-being of the people and their governments (Agyeman, 2005). Therefore, socio-political sustainability includes areas such as food production, food security, and poverty (Agyeman, 2005). These concerns include the disproportionate impact that poverty has on women and children and how to empower groups of people living in poverty to improve their welfare. It is also concerned heavily with education and working groups and individuals to provide information that encourages sustainable development. This area also includes government cooperation to tackle widespread issues, such as poverty.

In socio-political sustainability, democracy is promoted in an effort to meet basic human needs by providing basic human right (Hasna, 2007). These needs include food, shelter, education, health care, and a fair

distribution of income. Through empowerment, social development strives to empower people to meet their own needs and improve their own lives. The three (3) constituent parts of sustainable development are explained in the Venn diagram in figure 1 below.

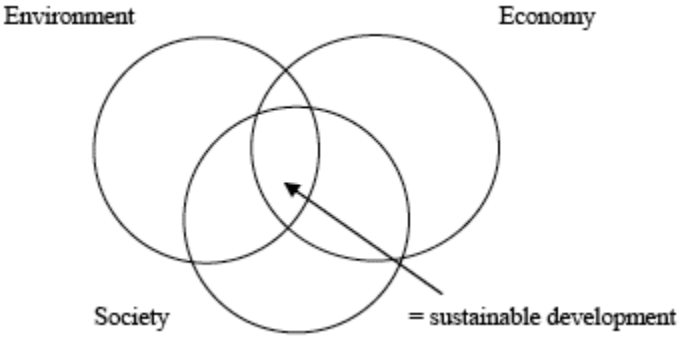

Fig 2: Venn Diagram to Russian Doll Explanations of Sustainable Development

Source: O'Riordan 2008

The Venn diagram of sustainable development has many versions but was first used in 1987 by an economist called Edward Barbier. However, Pearce, Barbier and Markandya (2009) criticized the Venn approach due to the intractability of operationalizing separate indices of economic, environmental, and social sustainability and somehow combining them. They also noted that the Venn approach was inconsistent with the Brundtland Commission Report, which emphasized the inter-linkages between economic development, environmental degradation, and population pressure instead of three objectives. Economists have since

focused on viewing the economy and the environment as a single interlinked system with a unified valuation methodology (Dasgupta, 2007).

Intergenerational equity can be incorporated into this approach, as has become common in economic valuations of climate change economics (Heal, 2009). However, Endress *et al.* (2005) argued that ruling out discrimination against future generations and allowing for the possibility of renewable alternatives to petro-chemicals and other non-renewable resources, efficient policies are compatible with increasing human welfare, eventually reaching a golden-rule steady state. Thus the three pillars of sustainable development are interlinkages, intergenerational equity, and dynamic efficiency (Stavins et al. 2003).

By interlinkages, Stavins and colleagues meant that the three dimensions of sustainability (economic, environmental, social sustainability) must be interlinked to achieve sustainable development goals. The importance of interlinkages was emphasized in the United Nations 2030 Agenda for achieving sustainable development goals (Stavins et al. 2003). The 2030 Agenda presents a universal comprehensive and interlinked set of goals that define what we, the people of this planet, need to accomplish by the year 2030 to build a sustainable world that leaves no one behind. The Agenda enjoins actors

at every level, local, national, regional and global, to work together across their divides in global, regional and country contexts. The 2030 Agenda goes far beyond the imperatives of economic growth and moves into the necessary policy integration of the economic, social and environmental dimension of sustainable development. It links development to sustainability and recognises that there can be no sustainable development without peace and no peace without sustainable development.

The 2030 Agenda provides a comprehensive perspective for understanding the concept of development. The 2030 Agenda also envisions a world that must integrate and balance the three dimensions of sustainable development: the economic, social and environmental, and where the requirements of nature as well as of human beings are recognized. The Sustainable Development Agenda demands fundamental changes in how we produce and consume goods and services, how we manage our planet's natural resources, emphasizing the urgency of pursuing sustainable development. Such an interlinked and indivisible agenda demands mutually reinforcing and synchronized efforts in all dimensions and by all actors of sustainable development.

The UN's universality, its legitimacy as a multi-lateral convenor, and its acknowledged expertise in specific areas, makes its development system

the natural choice for harnessing the interlinkages that underpin sustainable development. The SDGs are interlinked and indivisible, calling for an equally integrated approach to implementation. Shining a light on the interlinkages and providing coherence is the new challenge for the UNDS, both in terms of knowledge and also in terms of managing the politics of development efforts. The principle of universality highlights the evolution from a UNDS centered on the needs of developing countries, which must continue as a priority, to one that also addresses the needs of global sustainable development.

The intergenerational equity laid emphasis on fairness or justice between generations. It emphasizes on fairness between generations currently living and generations yet to be born. Intergenerational equity focuses on the need to avoid discrimination against future generations by formulating policies that will preserve the environment for future generations. The continued depletion of natural resources that has occurred in the past century will likely be a significant burden for future generations (Wikipedia, 2016).

Dynamic efficiency is a situation where it is impossible to make one generation better off without making any other generation worse off (Stavins et al. 2003). It is an approach that makes present and future generations agree upon resource allocation. That is, current generations

may not under any circumstance use resources that would be denied to future generations. In other words, the resources use by previous generations should not exceed a level that would prevent subsequent generations from achieving a level of well-being at least as great.

Dynamic efficiency means that there will be a fair allocation, but only if the present generation is willing to save some of the net benefits from the extracted resources for use by future generations (Wheaton, 2014). This is closely related to the "golden rule of saving." It suggests that, at a minimum, future generations should be left no worse off than current generations. A sustainable allocation occurs when the value of the total capital stock is declining (Wheaton, 2014). However, a constant level of consumption could be maintained perpetually from an environmental endowment if all scarcity rent were invested in capital. A specific degree of sharing between generations would be necessary to produce a sustainable outcome.

Cultural Sustainability

Cultural sustainability is a new interdisciplinary approach, aimed at raising the significance of culture and its factors in local, regional and global sustainable development (Drexhage and Mulphy, 2010). Culture is an important aspect of sustainable development, as it refers to how we understand and appreciate natural resources and each other. However,

the role and meaning of culture within the framework of sustainable development is relatively vague both in science and policy.

Sometimes, culture has been treated as a component of social sustainability, sometimes as a fourth pillar (Hawkes, 2005), or even as a key dimension of sustainable development (Duxbury and Gillette, 2007; Drexhage and Mulphy, 2010). However, the call for culture is becoming more powerful along with the increasing ecological, economic and social challenges to meet the aims of sustainability.

Sustainable development and culture have been connected in many international policy documents and conventions. The linkage between biodiversity and culture were already recognized by the Convention of Biodiversity (1992) and since then by many other related documents. Culture is also mentioned as an important aspect of sustainable development in many policy documents of European Commission and Council, for example in the European Agenda for culture (European Commission, 2007).

In academic research, culture has been considered as an important aspect of sustainable development in the context of indigenous cultures, developing countries, and nature conservation, and also in the context of primary production, tourism and regional development (Hawkes, 2005;

Duxbury and Gillette, 2007). These studies usually suggest that cultural sustainability requires the recognition of local cultural values, equal rights and cultural logic of the respective communities in policy planning and decision-making, providing support for community-based or participatory approaches. Thus, cultural sustainability is aiming for increasing understanding of cultural dimension of sustainable development thorough multidisciplinary approaches (Throsby, 2008).

Cultural sustainability is also associated with the role of art, creativity and cultural activities for community vitality and community planning. Moreover, the promotion of cultural diversity and the preservation and conservation of tangible and intangible (local) cultural heritage have been considered important for sustainable development by many studies (e.g. Duxbury and Gillette, 2007; Drexhage and Mulphy, 2010). In addition to these aspects, cultural sustainability has been viewed more broadly, as a cultural evolution towards more sustainable way of life, based on ethical choices in the everyday activities. In this respect cultural policy, social learning, innovations and education for sustainable development have been considered to be the essential means for the required cultural change (Throsby, 2008).

2.3.5 Theories and Approaches to Sustainability

There are two main approaches to sustainability, namely "strong" and "weak" approaches (Jonas, 2004; Robinson, 2004; Hasna, 2007; Drexhage and Mulphy, 2010). In addition to these two approaches, there are three models which examined sustainability taking its constituent parts into considerations. These three models include economic, ecological and political models. We shall examine these approaches and models in details.

Strong and Weak Approaches to Sustainability

Strong sustainability gives priority to the preservation of ecological goods, like the existence of species or the functioning of particular ecosystems (Ott, 2003). The concept is based on the scientific fact that all human life and activity occurs within the planet or biosphere where mankind lives. It is true that without a functioning biosphere there can be no societal functions, including an economy. Strong sustainability assumes that "human capital" (e.g. skills, knowledge) and "natural capital" (e.g. minerals, water, land) are complementary but not interchangeable. It denotes that no amount of economic progress can justify leaving future generations with a degraded environment. Unlike weak sustainability, strong sustainability puts the emphasis on ecological scale over economic gains. This implies that nature has a right to exist and that it has been borrowed and should be passed on from one

generation to the next still intact in its original form. An example of strong sustainability could be the manufacturing of office carpet tiles from used car tyres. In this scenario, office carpets and other products are manufactured from used motorcar tyres that would have been sent to a landfill (Wikipedia, 2016).

The weak sustainability holds that human capital can substitute natural capital. Human capital incorporates resources such as infrastructure, labour and knowledge, while natural capital covers the stock of environmental assets such as fossil fuels, biodiversity and other ecosystem structures and functions relevant for ecosystem services. In weak sustainability, the overall stock of man-made capital and natural capital remains constant over time. It is important to note that unconditional substitution between the various kinds of capital is allowed within weak sustainability. This means that the natural resources may decline as long as human capital is increased. Examples include the degradation of the ozone layer, tropical forests and coral reefs if accompanied by benefits to human capital. Such benefit to human capital could be increased financial profit (Cart, in Wikipedia, 2017). Another example of weak sustainability could be mining coal and using it for the production of electricity. The natural resource coal, is replaced by a manufactured good which is electricity. The electricity is then used to

improve domestic life quality (e.g. cooking, lighting, heating, refrigeration and operating boreholes to supply water in some villages) and for industrial purposes (growing the economy by producing other resources using machines operated).

In practice, weak sustainability has had both positive and negative results. The weak perspective is undermined by a lack of knowledge of the future, as we do not know which intrinsically valuable resources will be able to be replaced by technology (Beder, in Wikipedia, 2016). A weak sustainability disregards specific obligations to sustain any particular good, espousing only a general principle to leave future generations no worse off than we are. In terms of protecting old-growth forests, for example, a strong view might argue for protection, even if it requires foregoing development that would increase opportunities for future generations. A weak view would take into account the various benefits old growth forests provide, and would then attempt to measure the future value of those benefits against the values created by development (Ott, 2003; Robinson, 2004).

The two views loosely correspond to eccentric (ecologically centered) and anthropocentric (human-centered) positions in environmental ethics, but not perfectly. The eccentric view requires that moral decisions take into account the good of ecological integrity for its own sake, as opposed to

exclusively considering human interests. But a strong sustainability view could be held from an anthropocentric perspective by arguing that human systems depend on rich biodiversity or that human dignity requires access to natural beauty. Note also that a weak view would not necessarily approve the expiration of natural resources, even with the prospect of lucrative profit. For insofar as opportunities for future generations depend on certain ecological processes (e.g., breathable atmosphere), some ecological goods will always be more valuable than the economic development they make possible.

The idea of strong sustainability received more political attention as sustainability development discussions evolved in the late 1980s and early 1990s. A key landmark was the Rio Summit in 1992 where the vast majority of nation-states committed themselves to sustainable development. This commitment was demonstrated by the signing of Agenda 21, a global action plan on sustainable development (Wikipedia, 2016).

The Pragmatic Middle View

Apart from the strong and weak approaches to sustainability, there is a third approach known as pragmatic middle view. A pragmatic middle view holds that, while we may not have obligations to sustain any particular non-human form of life or ecological process (the strong view),

neither should we assume that all future opportunities can be measured against one another (the weak view). The moral and political philosopher Brian Barry (1997) argued that preservation of some opportunities for future generations requires the enduring existence of particular ecological goods. For example, the opportunity to decide whether or not old-growth forests are required for a decent human life depends on their preserved existence. This approach effectively proposes that we must sustain conditions for the ongoing debate over sustainability.

In another pragmatic approach, the philosopher Hans Jonas has proposed that new powers of human agency, able to comprehensively threaten their own conditions, require a new moral imperative to act responsibly for the sake of human survival. Perhaps sustainability is neither a strong question about nature's intrinsic value nor a weak one about producing opportunities but rather a pragmatic question about keeping our species in existence (Jonas, 2004).

By now it is evident that theories of green marketing (sustainable marketing) and sustainable development have become too complex to organize with dualistic terms like "strong" and "weak" or "eccentric" and "anthropocentric." We might instead think in terms of models for sustainability, each prioritizing its own component of what must be sustained. These models are economic, ecological, and political models.

These three (3) models are not mutually exclusive and often integrate complementary strengths of the others. Distinguishing them, however, helps make sense of alternative concepts of sustainability.

Economic Model

Economic model proposes to sustain opportunity, usually in the form of capital. According to the classic definition formulated by the economist Robert Solow (1994), we should think of sustainability as an investment problem, in which we must use returns from the use of natural resources to create new opportunities of equal or greater value. Social spending on the poor or on environmental protection, while perhaps justifiable on other grounds takes away from this investment and so competes with a commitment to sustainability.

With another view of capital, however, the economic model might look different. If we do not assume that "natural capital" is always interchangeable with financial capital, argue Herman Daly (1996) and other proponents of ecological economics, then sustaining opportunity for the future requires strong conservation measures to preserve ecological goods and to keep economies operating in respect of natural limits. These considerations complement an ecological model.

From a different perspective of the relation between opportunity and capital, spending on the poor might be regarded as a kind of investment

in the future. According to the economist Amartya Sen's "development as freedom" dictum (1999), we create options for the future by creating options for today's poor because more options will drive greater development. In this political model of sustainability, sustaining opportunity for the future requires investing in individual dignity today. This approach complements the political model.

Ecological Model

Ecological model proposes to sustain biological diversity and ecological integrity. That is, rather than focusing on opportunity or capital as the key unit of sustainability, they focus directly on the health of the living world (Rolson, 2004). Within this model, there are two major ways of deciding which ecological goods to sustain. From an anthropocentric point of view essential natural resources should be sustained, as should those ecological systems and regenerative processes on which human systems rely. From an eccentric point of view species should be sustained for their intrinsic value, as should ecological systems as generators of creatures with intrinsic value. In policy, as noted above, strong and weak views may converge.

Political Model

Political model proposes to sustain social systems that realize human dignity. Concerned with the way in which local and global environmental problems jeopardize human dignity, these models focus on sustaining

the environmental conditions of a fully human life. Environmental justice and civic environmentalism represent one strategy of this model; by focusing on environmentally mediated threats to human life they point to necessary ecological goods or sustainable environmental management schemes (Ageyman, 2005). Other strategies within this model, such as agrarianism or deep ecology, involve more substantive visions of the human good.

Ultimately, these models recommend sustaining the cultural conditions needed to realize ecological personhood, civic identity, or even personal faith through ecological membership (Plumwood, 2012).One subset of the political model takes a pragmatist's approach and suggests that we must maintain conditions for keeping open the debate about sustainability. In this view sustaining a political system of deliberative democracy effectively requires sustaining ecological and economic goods along with political goods like procedural rights. Note, however, that both the quality and quantity of those goods is regulated by the needs of the political system, which thereby constrains sustainability commitments.

Having discussed all the available models that dealt on sustainability in literature, this study based its analysis on the ecological model which proposes to sustain biological diversity and ecological integrity. The reason for using the ecological model is because it directly emphasized

the need for the preservation of the natural resources in the environment which is the focus of this study.

2.3.6 Demographic and Economic Determinants of Sustainable Consumption

Studies have shown that demographic and economic variables of consumers influence their sustainable lifestyles (Ibok and Etuk, 2014). These variables include gender, income status and education. According to Hailes (2007), highly social and environmentally conscious person are female, pre-middle aged with a high level of education with an above average socio-economic status. Mclntyre, Meleche and Lewis (1993) argued that females were more conscious of the environment in their consumption pattern than their male counterparts. However, Reigenstein, Hills and Philpot (1974) discovered that only men were willing to pay for sustainable environmentally protection.

Balderjahn (1988) is of the opinion that the use of non-polluting products was more intense among men than among women. Hendon (1972) cited in Ibok & Etuk (2014) observed that consumers with high or medium income bracket were more likely to be environmentally conscious than the below average income consumers because their high level of income and that education were likely to increase their sensitivity to social and environmental problems. The environmentally conscious

consumers are less educated and has a lower than average income in America. Income and education are not good predictors of environmental consciousness (Ibok & Etuk, 2014).

However, most studies on consumers' demographic and socio-economic characteristics have been quite contradictory; and the fact that they exert a significant influence upon their thinking including their consumption behaviour is not in doubt. Ibok & Etuk (2014) stated that awareness of environmentally friendly products is recognized in most consumer behaviour research as a characteristic that influences decision process. Consumer's awareness is a significant construct affecting how consumers collect and interpret information (Ibok & Etuk, 2014). Chan (1999) also observed that awareness is a significant predictor of how friendly a consumer is with his environment, when it concerns consumption behaviour.

2.3.7 Sustainable Consumption and Sustainable Development

Sustainable consumption or green purchasing has a strategic contribution to sustainable development and more specifically the environment (Green *et al.* in Ongisa, 2013: p30). Although this global phenomenon is recent, the potential of purchasing to contribute to sustainable development was mentioned as early as 1975 by Taylor (Murray, 1999). Terms such as sustainable procurement (SP),

environmentally preferable purchasing (EPP) and green purchasing (GP), green marketing have been used in different literature. Environmental Protection Agency (EPA), (2000) cited in Ongisa (2013:p30) defined environmental preferable purchasing as buying "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose"

Green Purchasing (GP) is also defined as an environmentally conscious purchasing initiative that tries to ensure that purchased products or materials meet environmental objectives set by the purchasing entity/ or individual, such as reducing the sources of wastages, promoting recycling, reuse, resource reduction, and substitution of materials (Zsidisin and Siferd, 2001). Jimenez and Lorente in Ongisa (2013) stated that GP ensures that purchasing organizations or consumers consider the issue of sustainability in the purchasing of inputs, in addition to the traditional purchasing criteria of cost, quality, and delivery.

According to Hamner (2006) the seven basic GP activities are;

1. **Product content requirements**: Buyers specify that purchased products must have desirable green attributes such as recycled or reusable items.

2. **Product content restrictions**: Buyers specify that purchased products must not contain environmentally undesirable attributes such as lead, CFCs, plastic foam in packaging materials.
3. **Product content labelling or disclosure**: Buyers require disclosure of the environmental or safety attributes the contents of the purchased product. Such disclosure can be done using green seals and indicators of relative environmental impact such as scientific certification system offered by various commercial organizations.
4. **Supplier questionnaires**: Buyers send questionnaires to suppliers asking them to provide information about their environmental aspects, activities and/or management systems.
5. **Supplier environmental management systems**: Buyers require suppliers to develop and maintain an EMS. However, the buyer does not require the supplier to certify the system.
6. **Supplier certification**: Buyers require suppliers to have an EMS that is certified as fully compliant with one of the recognized international standards such as the British Standard 7750, ISO 14001 from the ISO, and the European Union Eco-Management and Audit Scheme.

7. **Supplier compliance auditing**: Buyers audit suppliers to determine their level of compliance with environmental requirements.

Several factors can motivate firms to adopt green initiatives so as to achieve sustainable development. For instance, Rao (2006) stated that consumer pressure and expected business benefits are the most influential factors affecting sustainable consumption. Forman and Jorgensen in Ongisa (2013) affirmed that regulation, consumer pressure, social responsibility (SR) and expected business benefits have significant effects on sustainable consumption. Min and Galle (2001) argued that regulation and expected business benefits are the most significant drivers. However household consumption accounts for more than 60 percent of all environmental impacts and 80 percent of this impact occur during end use (UNEP, 2010). Due to this, current attention to consumers‟ participation in sustainable consumption is growing (Park and Ha, 2011).

2.3.8 Green Marketing and Sustainable Consumption

To meet the challenge of sustainable development, businesses can help to foster more sustainable levels and patterns of consumption (Saxena & Khandelwal, 2010). There is a significant opportunity for business to help consumers choose and use their goods and services sustainably. In

order to do so, business must create sustainable value for consumers by supplying products and services that meet their functional and emotional needs – now and for future generations – while respecting environmental limits and common values (Symposium on Sustainable Consumption, Oslo, 1994; UN Commission on Sustainable Development (UNCSD).

The practice of green marketing can go a long way in encouraging sustainable consumption. According to Ibok & Etuk (2014), green marketing emerges as a concept designed to protect the environment for sustainable and socially responsible production and consumption behaviour. They further stated that the obvious assumption of green marketing is that consumers would view a product or service greenness as a benefit and therefore base their consumption behaviour accordingly.

However, in order to promote sustainable consumption through green marketing, it is important to understand the consumers as the first logical process in green marketing. Understanding the consumers who are more receptive to green brands and willing to shift from grey products to green products through their choice may guide marketers to design their marketing strategies matching to profile of these consumers, resulting in enhancing the customer value and gaining competitive advantage for sustainable growth.

According to Ottaman (1993), the last decade or so has witnessed a radical change in consumer preferences towards green products with the emergence of green consumers provoking market mechanisms for environmentally friendly organizations and new product innovations. Technically, many firms are responding to this green consumer demand (D'Souza, 2006). Wessells et al (1999) stated that there are evidences that showed a demand for, and an awareness of information regarding environmental product attributes. For instance, Ottaman (1998) opined that situations in which two products are perceived as equal on all aspects except that one is superior in its environmental performance, environmental benefits may determine consumer preference and choice. This may be particularly important as a differentiation strategy for marketers where it is increasingly difficult for brands to differentiate themselves (Christensen, 1995), or in mature markets where there is intense competition (Menon et al, 1999).

Product differentiation has proven to be a successful competitive strategy that may also be applied within the environmental context. Therefore, the companies practicing the philosophy of green marketing will gain competitive advantage in the market place; and will enjoy sustainable consumption through green marketing.

2.3.9 Relevant Theories and Models on Green Marketing and Sustainable Consumption

Theories and models on green marketing and sustainable consumption attempt to prioritize and integrate social responses to environmental and cultural problems. There are several theories and models developed by eminent scholars of environmental marketing over the years. Some of these theories which are relevant to green marketing and sustainable consumption include Grey System Theory, Corporate Social Responsibility Theory, Theory of Planned Behaviour, and Green Consumerism Model.

Having considered all the theories and models relevant to green marketing and sustainable consumption, the present researcher noticed that most relevant theory or model that directly explain the relationship between green marketing and sustainable consumption is the Green Consumerism Model. This means that the researcher adopts the green consumerism model as his theoretical framework of analysis.

Green consumerism refers to recycling, purchasing and using eco-friendly products that minimize damage to the environment (Wang, 2006). This involves decisions such as using Energy Start appliances that consume less power, buying hybrid cars that have less carbon dioxide, using solar and wind power to generate electricity and buying

locally grown vegetables and fruits. In developed countries like USA, Canada, UK, China and Sweden, more and more businesses and industries are joining in the green movement, either out of a real interest in saving the planet or a desire to capitalize on the growing consumer demand for greener ways. Many companies for example, Wal-Mart (in US) anticipate savings to the tune of billions of dollars by reducing packaging across the supply chain and Wells Fargo issues carbon credits to offset its customers' credit card purchases.

In response to the environmental concern of the early 1970s to date, the green consumerism model becomes very important in explaining the practice of green marketing for sustainable consumption (Shi, 2010). This theory/model holds that green consumers are the driving forces behind green marketing practices. The theory also explains that green consumers are the ones who drive consumer demand, which in turn encourages improvements in the environmental performance of many products and companies.

Simula, Lehtimark & Salo (2009) described green consumerism as either a highly democratic strategy to save the planet or exploitative marketing, depending on who you are talking to. As strategy to save the planet, it confronts the mass of consumers in industrialized countries and in effect says: "it's up to you". Consumer demand has got us into the current

mess, now it has to get us out again. Consumer must inform themselves about major environmental problems and then, by being cross-informed through product labeling, they should only select environmentally responsible products and embrace green lifestyle to match their new consumption tastes. The idea is that when awareness of environmental problems penetrates deeply enough into the community consciousness the purchasing power of the mass market will force all manufacturers to go green both their products and manufacturing processes on pain of being rejected in the marketplace by green-leaning consumers. If all goes according to plan only those companies which adapt to the demand for greenness will survive and sustainable development will be achieved. This approach to environmentalism is seen as being consistent with our existing mainstream culture. It allows the majority of the people to participate in decision making process by way of voting with their credit cards.

From consumers' perspective, green consumption is generally directed to address a number of questions relating to how green consumerism could be achieved at different levels of society and, perhaps, even globally; whether the burden of increasing green consumption should be borne by individual consumers, as a moral obligation; and what factors affect individuals' choice of green practices in their routine interaction with the

environment (Pittavachawan et al, 2014). To properly understand the concept of green consumption behaviour, Ajzen (1991) developed a model called the "Green Consumerism Model" as shown in figure 2.

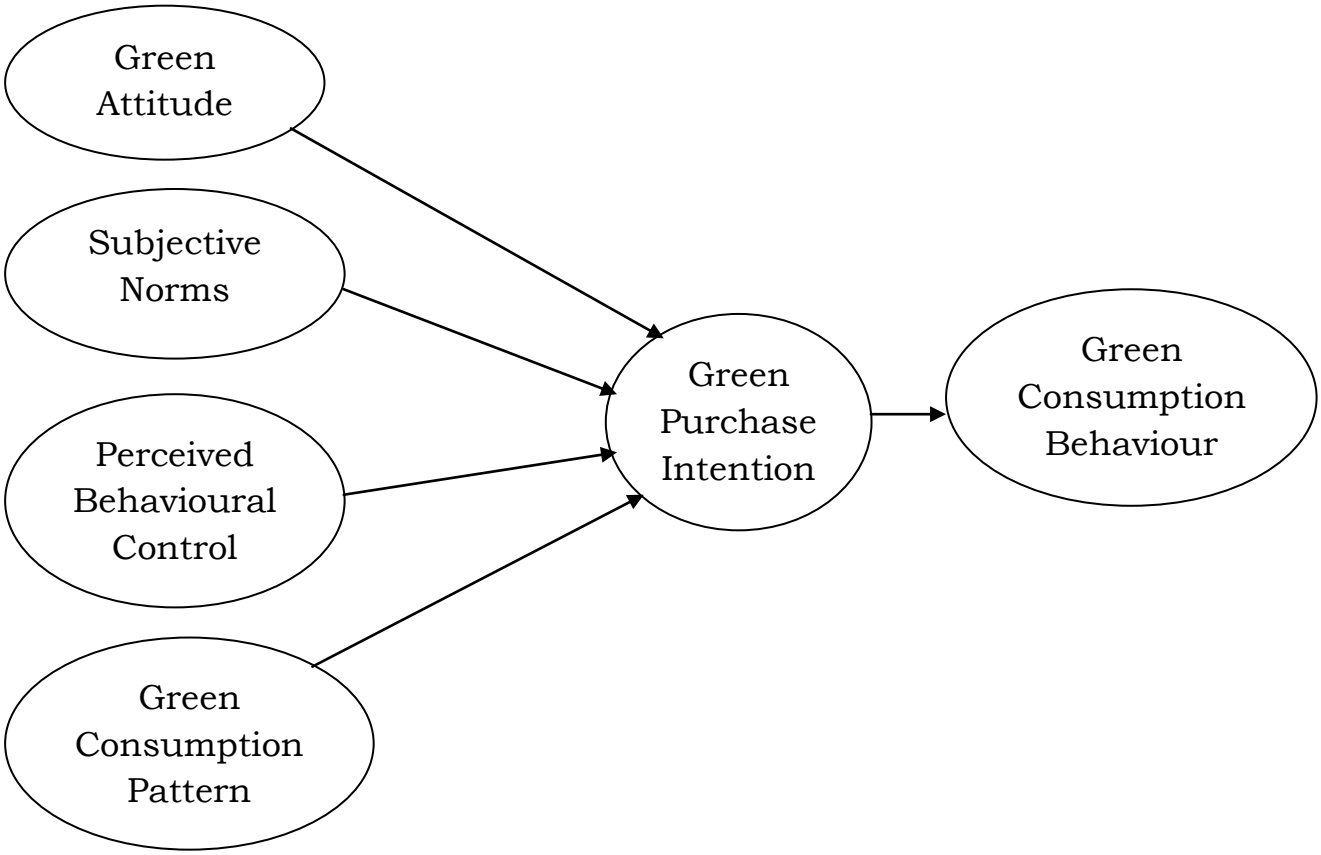

Fig. 3: Green Consumerism Model
Adapted from Ajzen (1991)

Attitude

According to Ajzen in Velnampy & Achchuthan (2016), attitude towards performing behaviour refers to perceptions of personal desirability to perform the behaviour. It depends on the expectations and beliefs about personal impacts of outcomes resulting from the behaviour.

Subjective Norm

The green consumerism model holds that subjective norm is a function of beliefs. If a person believes that his or her referents think that behavior should be performed, then the subjective norm will influence his or her intention to perform that particular behaviour (Velnampy & Achchuthan, 2016). The referents here refer to a group of people who are close to the individual, for instance family, peers, spouse, close friend, teachers and anyone considered important in the individual's life (Ariff et al., in Velnampy & Achchuthan, 2016).

Perceived Behaviour Control

According to Ajzen in Velnampy & Achchuthan (2016), perceived behaviour control reflects the perceived ability to execute target behaviour. It relates to an individual's perception on the degree of easiness and difficulties in performing such behavior, and it is assumed to reflect past experience as well as anticipated obstacles (Ajzen & Driver, 1992). This construct is affected by perceptions of access to necessary skills, resources and opportunities to perform the behavior. If an individual feels that he or she has control over the situational factors, he or she may develop the intention to perform the particular behavior. On the other hand, if an individual does not have control over the circumstances, he or she may have less intention to perform the

particular behaviour. Therefore, we can point that perceived behaviour control influences green purchasing intention to perform a green consumption behaviour.

2.4. Empirical Review

2.4.1 Empirical Studies on Green Marketing and Sustainable Consumption

A number of studies have been conducted on green marketing and sustainable consumption across the globe. However, most of the green marketing studies (e.g. Cheah & Phau, 2011; Park and Ha, 2012; Juwaheer *et al,* 2012) focused on how consumer attitudes and behaviours impact on sustainable consumption while others (e.g. Diamantopoulos *et al.,* 2003; Leonidou & Leonidou, 2011; Luzio & Lemke, 2013) concentrated on the influence of gender of green consumers (socio-demographic or psychographic) on sustainable consumption. For instance, the study conducted by Cheah & Phau (2011) revealed that consumers with favourable attitudes towards environmentally friendly products are more likely to purchase environmentally friendly products. They demonstrated that consumers with eco-literacy, interpersonal influence and value orientation have strong correlations with attitudes towards environmentally friendly products.

Park and Ha (2012) empirically examined sustainable consumers and apathetic consumers with a view of understanding the influence of their pro-environmental behaviour on sustainable consumption. The result of their study showed that green product purchasers exhibited significantly higher levels of cognitive attitude, affective attitude, social norm, personal norm, and recycling intention.

Juwaheer *et al.* in Ongisa (2013) carried out an empirical study on the impact of green marketing strategies on consumer purchasing patterns. Their study found that there was a strong positive correlation between marketing strategies and consumer purchasing patterns of green products. The study conducted by Perry and Singh (2002) also showed that consumers play a major role in environmental sustainability since they can exert considerable pressures and demand goals of sustainability or environmental performance from businesses.

In another study conducted in the United States of 400 Midwestern consumers, 36 percent of the respondents were found to be “very likely” to change from one food brand to another competitive label which used a recycled carton; only 2.8 percent stated that they would be “somewhat unlikely” to make brand changes because of recycled packaging (Eisenhart, 1990).

However some studies have showed that many individuals who are concerned about the environment do not practice sustainable consumption. For instance, the study conducted by Bonini *et al.* (2008) revealed that 53 percent of consumers in Brazil, Canada, China, France, Germany, India, the UK, and the US are ideally concerned about environmental issues but are not practically and actively protecting the environment. Also, the study conducted by Pickett-Baker and Ozaki in Ongisa (2013) revealed that people who are environmentally conscious do not necessarily purchase green products and services.

Some studies (e.g. Luzio *et al.*, 2013; Laroche *et al.,* 2001; Wheale and Hinton, 2007) have showed that sustainable consumption can take various forms as some consumers could buy conventional products but still exhibit environmentally friendly practices such as appropriate recycling or disposal. Unfortunately, the Kenyan consumer has not exhibited environmentally friendly practices such as environmentally preferable purchasing or appropriate disposal. The consumer might not choose green products because of other considerations such as cost, quality and loyalty. The study conducted by Luzio & Lemke (2013) revealed that some consumers who are concerned about the environment buy conventional products but still exhibit environmentally friendly practices such as appropriate recycling or disposal. .

Singh & Pandey (2012) examined green marketing and its policies and practices for sustainable development. They studied organic products (food) in the Florida, United States. Their study concluded that green marketing significantly enhance sustainable development.

Wang (2009) carried out an empirical study on sustainable consumption from the consumer's perspective. His study focused on the purchase intention of green food in China. Wang employed a revised Responsible Environmental Behaviour (REB) model as his conceptual framework to examine the factors of green food purchase intentions in China. A web-base questionnaire survey was used in the study to collect the primary data from the capital city, Beijing. The result of his study indicated that locus of control, attitude, personal responsibility, knowledge of issue and action skills are the major factors that indirectly affect consumers' intention.

In another study conducted by Szuster (2008) in the UK, it was revealed that green marketing plays a significant role in achieving sustainable development. Other studies conducted in developed nations such as UK (e.g. Macdonald & Oates, 2006; Donaldson, 2005) and in US (e.g. Polonsky, 2001; Prothero, 2008), also discovered the contribution of green marketing to sustainable development.

Dimitrova (2010) carried out a study on sustainable consumption. Their study focused on sustainable consumption practices and attitude-behavior gap. The findings of their study revealed that consumers' positive attitudes are not always translated into actual ethical actions, leaving low proportion of regular sustainable buyers and low market share for green products. The study conducted by Saxena & Khandelwal (2010) also reported that green marketing is a vital tool for achieving sustainable consumption.

Seyfang (2007) carried out an empirical study on growing sustainable consumption communities – the case of local organic food networks. The study applied the New Economics Theory to assess the effectiveness of initiatives at achieving sustainable consumption. The result indicated that the initiative was effective at achieving sustainable consumption in each of the dimensions of the appraisal (localization, reducing ecological footprints, community building, collective action and creating new socio-economic institutions).

Sarkar (2012) examined the relationship between green marketing and sustainable development in India. The researcher focused on the challenges and opportunities of green marketing as a viable tool for sustainable development. The result of their study confirmed that green marketing significantly enhance sustainable development. The study

carried out by Macdonald & Oates (2006) also found a direct relationship between green marketing and sustainable development. The result of these empirical studies implies that the achievement of sustainable development largely depends on effective practice of green marketing.

Evans & Jackson (2008) empirically examined sustainable consumption from the perspectives of social and cultural theory. The study revealed that socio-cultural approaches bring consumption together with the agendas of environmental sustainability. The study also revealed that the real challenge of sustainable consumption is confronting the tension inherent in the idea of sustainable consumerism.

Within the Africa context, studies on green marketing and sustainable consumption are very scanty. The only direct study was the one conducted by Ongisa (2013). Ongisa investigated the disconnect between green marketing and green consumption in Kisii County, Kenya. He examined the concepts of green marketing, green purchasing and green consumerism in order to identify the disconnection between the theory and practice. The result of his study showed that Kenyan consumers pay little attention to eco-labelling, eco-advertising. He also reported that product characteristics such as recyclability and easy disposal are rarely considered when making purchases.

From the empirical studies reviewed, it could be noticed that most of the studies conducted on green marketing and sustainable consumption were carried out in the developed nations such as United States of America (for example, Singh & Pandey, 2012; Prothero, 2008; Oyewole, 2001; Polonsky, 2001); in United Kingdom (for example, Szuster, 2008; Seyfang, 2007; Grant, 2007; Evans & Jackson, 2008; Macdonald & Oates, 2006; Donaldson, 2005); in Sweden (for example, Awan, 2011; Vaccaro, 2009; Kreidler & Joseph, 2009); in China, (for example, Wang, 2009; Zeng Yong & Wei, 2009); in Canada (for example, Peattie & Crane, 2005). Some studies on green marketing and sustainable development have been conducted in developing country like India (for example, Saxena & Khandelwal, 2010; Sarkar, 2012), as well as in African nation like Kenya (for example, Kinoti, 2011). Obviously, available empirical literature in the area of green marketing and sustainable development is dominated by Western and American studies.

The categories of companies studied by previous researchers include automobile companies which deals on car and technology products (Zeng Yong & Wei, 2009; Donaldson, 2005; Vaccaro, 2009); energy products (Awan, 2011); durable and non-durable products (Saxena & Khandelwal, 2010), organic products (Sarkar, 2012), organic foods (Singh & Pandey, 2012) and recycling products such as bottled waters (Kinoti, 2011). The

present study concentrated on companies which deal on recycling products such as plastic containers, packing bags, bottled waters, pure water sachet, papers, glass, and metals. The main reason for using these companies is because their products have significant impact on the environment.

The unit of analysis of these various studies range from marketing managers (Cheah and Phau, 2011; Bonini *et al.*, 2008; Park and Ha, 2012; Pickett-Baker and Ozaki, 2008; Saxena & Khandelwal, 2010; Singh & Pandey, 2012; Donaldson, 2005); companies' chief marketing executives (Kinoti, 2011; Polonsky, 2001; Sarkar, 2012; Szuster, 2008 and consumers (Peattie & Crane, 2005; Zeng Yong & Wei, 2009). In the present study, the unit of analysis is general managers and marketing directors of the manufacturing companies quoted on the Nigerian Stock Exchange, and consumers. This chosen unit of analysis is consistent with the study of Saxena & Khandelwal (2010), Singh & Pandey (2012) and Donaldson (2005), Peattie & Crane (2005) and Zeng Yong & Wei (2009).

2.4.2 Gap in Theoretical and Empirical Review

Based on the foregoing theoretical review, a number of theoretical limitations and shortcomings were noted in green consumerism model. Even though green consumerism model as discussed above, seems to

incorporate positive values from an environmental point of view, there was still much debate about the role and importance of green consumption and green consumerism. Critics argue that green consumption is only a way of slowing world degradation, and not a tool to end it (Durning, 2002; Peattie, 2005; Simula, Lehtimark, & Salo, 2009; Shi, 2010). Durning (2002) argued that: "At its best green consumerism is a potent new tactic for environmental advocates, allowing them to bypass the halls of parliaments and send their message directly to boardrooms. At its worst, green consumerism is a palliative for the conscience of the consumer class, allowing us to continue business as usual while feeling like we are doing our part" (Durning, 2002).

However, even though the critic appear sound it is important to realise that green consumption is only one part of a greater effort needed to steer industrialised countries towards sustainability. Peattie (2005) argued that green consumption will have an effect only as part of a wider process of change, but that wider change process will not be able to happen without the focus on green consumption.

The present researcher therefore argued that the green consumerism model has a major shortcoming within the Nigeria context. This model may only be relevant in the developed countries particularly in the Western and Asia countries where green consumers can clearly be

identified and where the green consumerism movement is being noticed. The green consciousness is still embryonic in African country like Nigeria, and consequently, the green consumerism model may not adequately explain green consumption behaviour in a less sophisticated and conscious context like Nigeria.

The shortcomings of this theory could be a platform for conceptualizing a more robust and integrative theory/model for explaining the relationship between green marketing and sustainable consumption. Therefore, in this section, the researcher makes a constructive criticism of the green consumerism model which was adopted as the theoretical framework of analysis in this study, and therefore develops a GMSC model following the shortcomings of this model.

From the empirical studies reviewed, a number of gaps were noted. First, none of the previous studies (e.g. Saxena & Khandelwal, 2010; Wang, 2009; Kinoti, 2011; Evans & Jackson, 2008; Singh & Pandey, 2012; Seyfang, 2007; Sarkar, 2012; Dimitrova & Krystallis, 2010) examine the relationship between green marketing and sustainable consumption; rather the two concepts were investigated separately. There is need to link each components of green marketing (green products, green pricing, green promotion, green distribution) to sustainable consumption.

Secondly, most of the previous empirical studies reviewed were carried out in developed countries. The few African study accessed was conducted in Kenya (Kinoti, 2011; Ongisa, 2013). The results from the studies conducted in developed countries and the only African study may not adequately reflect or represent the actual practices of green marketing for sustainable consumption within the African continent to which Nigeria belongs. This is in connection to the fact that consumer behaviour and response to green products differ globally. Even if it is argued that empirical studies exist within the Nigerian context, the present researcher was not able to assess them either from the libraries visited, research centers and the internet. This adds voice to the claim that aspect of green marketing and sustainable consumption has not been thoroughly and empirically investigated.

Following the vacuum created in previous empirical studies, this present study is set to assist in filling this gap in academic literature.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the methodology used in carrying out the study. It focuses on the research design, area of study, population of the study, sample size determination and sampling procedure, sources of data, questionnaire design and statistical methods of data analysis.

3.1 Research Design

The cross-sectional survey design was adopted in this study. According to Baridam (2001), cross-sectional survey design can be thought of as analogous to the taking of a snapshot of some situation and analyzing it. The survey relies on a sample of elements from the population of interest which are measured at a single point in time. The cross-sectional survey was used to examine the relationship between green marketing and sustainable consumption in the south-south region of Nigeria.

3.2 Area of Study

The area for this study is the south-south region of Nigeria. The South-South region of Nigeria is popularly known as Niger Delta region which consists of six (6) States namely; Akwa-Ibom State, Bayelsa State, Cross River State, Delta State, Edo State and Rivers State. Politically, these six (6) States constitute the South-South geopolitical zone of Nigeria. The South-South region covers an area of 70,000 square kilometers, with 5,000 communities, 50 ethnic groups and 250 dialects (NDDC, 2006).

The land in the South-South region is very rich in crude oil and natural gas. This is why the region is often referred to as the oil rich region of Nigeria. The oil and gas deposits in this region is huge and accounts for more than 80% of our crude extraction, and more than 70% of our revenue to the service of the entire nation's economy (NDDC, 2006). The land in this region is not only rich in oil and gas, but also well endowed with other natural resources like water, timber and other forest resources, wildlife and sharp sand. It is the third largest wetland in the world, following after the Amazon basin in Latin America (UNDP Niger Delta Human Development Report 2010). The land in this region is also endowed with various species of aquatic organisms. The region occupies 7.5% of Nigeria's land mass (NDDC, 2009).

This study concentrated on the south-south region because of the devastating nature of the environment. The oil and gas resources deposited in this region, as well as other natural resources like water, timber and other forest resources have attracted several companies to the region. The activities of these companies have to a large extent degraded the environment which has negatively affected the living standard of the people. For instance, the land and water have been polluted by oil spillage, which make it difficult for the people to engage in extensive agricultural activities, while the manufacturing activities of

these companies have degraded the environment. There is need to preserve the natural environment while trying to satisfy human needs. It is for this reason that this study was designed to concentrate on the south-south region with the view to promote environmental sustainability and sustainable consumption through green marketing practices. The map of the south-south region and its position in the Nigeria map is shown in Figure 4 and 5 below:

Figure 4: Map of the South-South Region of Nigeria

Figure 5: Position of the South-South region in the Nigeria Map

3.3 Population of the Study

The population of this study consisted of companies and consumers in the south-south region of Nigeria. From the companies, General Managers and Marketing Directors were the unit of analysis while the consumers consisted of marketing professionals (lecturers), NGOs, civil servants, labourers and market sellers. The population of the study is unknown. Hence it is impracticable to give the definite size of the population. As Brian in Nwankwo (2013) stated if the population is unknown, the researcher should provide a marginal estimate of that population. Marginal estimate of a population means a population size

(in figures) which may differ from the exact population size by being either very slightly higher or lower than the exact population size (Brian in Nwankwo, 2013). Following Brian's advice, we provide a marginal estimate of 133,725 persons of which 551 were General Managers, 574 were Marketing Directors and 132,600 were consumers in the south-south region of Nigeria.

3.4 Sample Size Determination and Sampling Procedure

The sample size was determined mathematically using the Taro Yemen's formula.

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size sought

N = population figure (133,725 persons)

e = level of significance (5%)

The sample size sought (n) is:

$$n = \frac{133,725}{1 + 133,725\ (0.05)^2}$$

$$n = \frac{133,725}{334}$$

n = **400**

A sample size of 400 persons consisting of general managers, marketing directors and consumers were drawn from the six states in the south-

south region of Nigeria. The sampling frame and sample size distribution is shown in table 3.1 and 3.2 below:

Table 3.1: Sampling Frame/List

Sampling List	Population	Sample Size
General Managers	551	62
Marketing Directors	574	68
Professional marketers (Lecturers)	7,763	41
NGOs	19,352	34
Civil Servants	32,543	62
Labourers	29,654	57
Market Sellers	43,288	76
Total	133,725	400

Source: Field Survey, 2016

Table 3.2: Sample Size Distribution

South-South Geopolitical Zone	General Managers	Marketing Directors	Consumers	Total
Akwa-Ibom State	13	11	45	69
Bayelsa State	11	9	42	62
Cross River State	10	12	48	70
Delta State	6	14	41	61
Edo State	8	10	49	67
Rivers State	14	12	45	71
Total	62	68	270	400

Source: Field Survey, 2016

The non-probability sampling method was used in selecting the sample for the study. The non-probability sampling consisted of accidental, purposive, and quota sampling methods (Nwankwo, 2016). The accidental sampling method was used in this study. According to

Nwankwo (2016), accidental sampling involves picking any available member of the population to be studied as part of the sample until the desired sample size is reached. By adopting this method, it meant that we picked any available managers, marketing directors, lecturers, NGOs, civil servants, labourers and market sellers until we arrived at a sample of 400 persons.

3.5 Sources of Data

The data for this study were collected from two sources namely the secondary and primary data sources.

3.5.1 Secondary Data Sources

The secondary data were collected from published materials such as textbooks, articles, journals, seminars papers and periodicals. The information gathered from secondary sources was mainly utilized in the literature review aspect of this study.

3.5.2 Primary Data Source

The primary data were obtained through the administration of questionnaire to the respondents. The primary data are first hand information and they were used to compare with those information obtained from secondary sources.

3.6 Questionnaire Design

The instrument for this study consisted of structured questionnaire which was designed to address the variables identified and reviewed in

this study. The questionnaire incorporates the various constructs within our GMSC model with a view to empirically validate the proposed model. The idea used in developing the instrument (questionnaire) was derived from literature based on the demands of the research questions and hypotheses postulated. The researcher also utilized some of the items in the questionnaire of previous studies (e.g. Szuster, 2008; Sarkar, 2012; Singh & Pandey, 2012). The researcher also made some minor adjustments to reflect the Nigerian context.

The questionnaire has two section (Section A and B). Section A sought information on demographic data of the respondents such as their sex, marital status, age, working experience (length of service), position, educational qualification, etc. while Section B elicit information on the key constructs in our GMSC model. The questionnaire was structured on five (5) points rating scale (Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree) reflecting the degree of agreement with the statements/items. Weights/values were assigned to the five (5) point likert scale thus: Strongly Agree = 5, Agree = 4, Undecided = 3, Disagree =2, Strongly Disagree = 1. Efforts were made to ensure clarity and brevity in items.

3.6.1 Operationalization of Construct

From the four main constructs within the proposed GMSC model, the independent variables are the components of green marketing (green products, green pricing, green promotion, green distribution) while the dependent variable is sustainable consumption. The independent variables were measured using 25 items. Items 1 - 8 assessed on green products; items 9 – 14 assessed green pricing; items 15 – 19 assessed green promotion; while items 20– 25 assessed green distribution. The moderating variable (sustainability) is measured using 6 items (items 26-31). The dependent variable, sustainable consumption was measured with 10 items. Some items that were used in developing the instrument were obtained from the questionnaire scale developed by Kinoti (2011), Wang (2007), Awan (2011), Saxena & Khandelwal, (2010) and Horne (2009)'s study of sustainable consumption. All the items in the questionnaire were measured using 5 point Likert-type scale with their assigned weights.

3.6.2 Validity of the Instrument

Validity refers to the degree to which a measuring instrument measures what it is supposed to measure (Baridam, 2006). In order to determine the validity of our research instrument, the researcher made an inquiry within the existing literature. Following Dillman's (2008) advice, we presented the questionnaire to some marketing experts and asked them

to review the questionnaire for structure, readability, ambiguity, and completeness. These experts suggested minor changes to increase the readability and reduce the ambiguity of a few questions. Their suggestions were incorporated in the final instrument before using it for data collection.

3.6.3 Reliability of the Instrument

Reliability is the degree of consistency to which an instrument measures what it is supposed to measure (Unamma, 2003). The reliability of the research instrument was determined using correlation procedures. That is, a test-retest method was adopted. The instrument was administered to a sample of twenty (20) managers and consumers who are not included in the original sample of the study. After a period of two (2) weeks, the same copies of the instrument were re-administered to the same subjects. Their responses at the two intervals were correlated using the Pearson's product moment correlation statistical method. The result of the correlation coefficient indicates 0.96. With the value 0.96, the research instrument is considered reliable. This is in agreement with Nzeneri (2005:4) interpretation of reliability coefficient as:

± 0.8 - 1.0 - Very High
± 0.6 - 0.8 - High
± 0.4 - 0.5 - Average
± 0.2 - 0.4 – Low
± 0.0 - 0.2 - Very Low

Since the value 0.96 is very high, it then means that our research instrument is very reliable.

3.6.4 Administration of Instrument

The researcher with the aid of trained research assistants administered the instrument (questionnaire) to the respondents across the six (6) States that make up the South- South region of Nigeria. In each location (state), four to five research students in the management field were recruited from local universities to help with the data collection. Before the survey, all these students were trained on the content of the questionnaire and how to conduct the survey. To solicit participation from the selected companies, the research assistants first contacted their general managers by telephone. In the initial telephone call, the research assistants emphasized that all the data would be used only for academic purpose and that confidentiality was guaranteed, and promised a final report of the survey was mailed to them.

Some companies' general managers and marketing directors who participated in the study granted personal interviews conducted by the research assistants; others asked for the questionnaire to be mailed to them, and promised that they will contact us after they had completed it. In the former case, research assistants conducted an oral interviewed among the marketing directors and general managers. In the latter case,

research assistants mailed the questionnaire to the managers and made a follow-up call one week later to confirm whether they have completed it and sent back. The reason for using trained research assistants is to enable the researcher administer questionnaire faster and easier across the six (6) States in the South-South region.

3.7 Statistical Method of Data Analysis

The data gathered from the questionnaire were analyzed using Mean, Standard Deviation and Spearman Rank Order Correlation Coefficient. Mean and Standard Deviation were used to analyze the questionnaire items with respect to the study variables. A criterion mean of 3.0 was set. The criterion mean was derived as follows:

$$\frac{5+4+3+2+1}{5} = 3.0$$

This means that for any item in the questionnaire to be accepted, it must score a mean weight of 3.0 or above, while anything less than 3.0 is rejected.

The researcher applied Spearman Rank Order Correlation statistic to test the hypotheses at 0.05 level of significance. The Spearman Rank Order Correlation Coefficient was computed using the SPSS (Statistical Package for Social Sciences) 19.0 windows version. The responses to the questionnaire items were inserted into the computer system and the software (SPSS) were used to correlate the data on the study variables.

3.7.1 Explanation of Measurement of Variables

The independent and dependent variables in each of the hypotheses formulated were measured with multiple item scale. The procedure for measuring the variables in each hypothesis is as follows:

For hypothesis one, the independent variable is green products which was measured with 8 items while the dependent variable is sustainable consumption which was measured with 10 items. The data obtained with respect to green products were correlated with the data obtained with regards to sustainable consumption using the SPSS, a computer software program. The reason for using the SPSS is to ensure accuracy and speedy computation. A double symbol ** implies that the correlation between the two variables is significant at 0.01 while a single symbol * indicates that the correlation between the two variables is significant at 0.05 levels. Where there is no symbol, it means that the correlation between the two variables is not significant.

For the second hypothesis, the independent variable is green pricing while the dependent variable is sustainable consumption. The independent variable (green pricing) was measured with 6 items while the dependent variable (sustainable consumption) was measured with 10 items. The data obtained on the two variables was inserted into the computer system and a computer software program (SPSS) was used to

correlate the data on the two variables. The SPSS output symbol ** indicates that the correlation between the two variables is significant at 0.01 while a single symbol * indicates that the correlation between the two variables is significant at 0.05 levels (2 tailed). But where there is no symbol, it implies that the correlation between the two variables is not significant.

For the third hypothesis, the independent variable is green promotion while the dependent variable is still sustainable consumption. Green promotion was measured with 5 items while sustainable consumption was measured with 10 items. The data obtained on the two variables were correlated in a computer system using SPSS window 19.0 version. The resultant symbol ** implies that the correlation between the two variables is significant at 0.01 (2 tailed) while a single symbol * indicates that the correlation between the two variables is significant at 0.05 levels. But where there is no symbol, it implies that the correlation between the two variables is not significant at 0.01 or 0.05 levels (2 tailed).

For the fourth hypothesis, the independent variable (green distribution) was measured with 6 items while the dependent variable (sustainable consumption) was measured with 10 items. The data obtained on the two variables (green distribution and sustainable consumption) were correlated using the SPSS. The symbol ** which emerged from the SPSS

output indicates that the correlation between the two variables is significant at 0.01 while a single symbol * indicates that the correlation between the two variables is significant at 0.05 levels (2 tailed). But where the SPSS output does not indicate the symbol like *, it means that the correlation between the two variables is not significant.

For the fifth hypothesis, the independent variable is green marketing and the dependent variable is sustainable consumption. The independent and dependent variables in this hypothesis was moderated by sustainability. The data obtained on the three variables (green marketing, sustainability and sustainable consumption) was correlated using the SPSS. The SPSS output symbol ** indicates that the correlation among the three variables is significant at 0.01 and 0.05 levels (2 tailed). But where the output indicates no symbol **, it implies that the correlation among three variables is not significant.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

The data gathered in this study were presented and analyzed to obtain answers to the research questions and hypotheses. A total copy of four hundred (400) questionnaires was administered to the respondents and 364 copies were retrieved which represents 91% collection rate (see table 4.1 below):

Table 4.1: Questionnaire Collection

Respondents	Questionnaires Administered	Questionnaires Collected	Percentage
General Managers	62	53	13%
Marketing Directors	68	59	15%
Consumers	270	252	63%
Total	400	364	91%

Source: Field Survey, 2016.

4.1 Demographic Analysis

The demographic data of the 364 respondents were presented and analyzed in this section. The demographics include gender, marital status, age bracket, working experience and educational qualification. Table 4.2 below shows the demographic analysis of the respondents in this study:

Table 4.2: Demographic Analysis

Demographics	Category	Frequency	Percentage (%)
Gender	Male	208	57%
	Female	156	43%
	Total	364	100%
Marital Status	Single	127	34%
	Married	193	53%
	Divorced	14	4%
	Widower	11	3%
	Separated	19	5%
	Total	364	100%
Age	18 – 30 years	68	19%
	31 – 40 years	103	28%
	41 – 50 years	118	32%
	51 – 55 years	45	12%
	55 years and above	30	8%
	Total	364	100%
Working Experience	1-5 years	52	14%
	6-10 years	73	20%
	11-15 years	94	26%
	16-20 years	87	24%
	21years and Above	58	16%
	Total	364	100%
Educational Level	S.S.C.E./N.E.C.O/G.C.E.	76	21%
	ND/N.C.E	87	24%
	B.Sc./B.ED./B.A./H.N.D.	102	28%
	M.Sc./M.ED/M.A/M.B.A	71	20%
	PhD	28	8%
	Total	364	100%

Source: Field Survey, 2016

Demographic analysis in table 4.2 shows that out of the 364 respondents who completed and returned the questionnaires, 208 (57%) were males and 156 (43%) were females. In terms of their marital status, 127 (34%) were singles; 193 (53%) were married; 14 (4%) were divorced; 11(3%) were widowers; and 19 (5%) of the respondents were separated. With regards to respondents age bracket, 68 (19%) were between the ages of 18 – 30 years; 103 (28%) falls between the ages of 30-40 years; 118 (32%)

were between the ages of 41 - 50 years; 45 (12%) falls between the ages of 51 - 55 years; and 30 (8%) were 55 years and above. In terms of their working experience, 52 (14%) have a working experience of 1-5 years; 73 (20%) have 6-10 years working experience; 94 (26%) have 11-15 years working experience; 87 (24%) have 16-20 years working experience; and 58 (16%) have a working experience of 21 years and above. When it comes to educational qualification of the respondents, 76 (21%) have SSCE, NECO, or GCE certificate; 87 (24%) have N.D or N.C.E certificate; 102 (28%) have B.Sc., B.ED., B.A., or H.N.D certificate; 71(20%) have M.Sc., M.ED, M.A. or M.B.A. certificate; while the remaining respondents, 65 about (8%) were PhD holders.

4.2 Data Analysis

The analysis focuses on the study variables i.e. the dimensions of green marketing (green product, green pricing, green promotion and green distribution), sustainability and sustainable consumption.

Table 4.3: Mean scores of general managers and marketing directors on green products

S/N	Green Products Items	General Managers 53		Marketing Directors 59		Mean Set	SD Set	Remarks
		$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	$\overline{X}_1\,\overline{X}_2$	SD_1SD_2	
1.	I am aware of products which are designed with environmental issue in mind.	3.39	1.26	3.47	1.91	3.43	1.59	Accepted
2.	My company produces products with environmental issue in mind.	3.19	1.21	3.10	1.20	3.15	1.21	Accepted
3.	My company's products are organic, non-toxic and bio-degradable products.	3.14	1.12	3.06	1.08	3.10	1.11	Accepted

4.	My company packages its products in recyclable and reusable containers instead of single serving packages.	3.21	1.28	3.30	1.12	3.26	1.20	Accepted
5.	My company packages its products in recyclable and reusable containers for environmental reasons.	3.23	1.31	3.12	1.17	3.18	1.24	Accepted
6.	Environmentally responsible products are important to save natural resources.	3.12	1.16	3.18	1.20	3.15	1.18	Accepted
7.	Green products will reduce pollution and other environmental problems.	3.28	1.19	3.36	1.28	3.32	1.24	Accepted
8.	I have convinced members of my association to produce only those products which are less harmful to the environment.	3.24	1.11	3.10	1.24	3.17	1.18	Accepted
	Grand Mean/SD	**3.23**	**1.21**	**3.21**	**1.28**	**3.22**	**1.25**	

Table 4.3 shows the mean responses of general managers and marketing directors on green products. From the table, it is observed that both general managers and marketing directors agreed on the items listed in the table, with their mean scores greater than the criterion mean of 3.00. The grand mean scores of 3.23 and 3.21 for general managers and marketing directors respectively are greater than criterion mean of 3.00 indicating that both general managers and marketing directors accepted the items in the table.

Table 4.4: Mean scores of general managers and marketing directors on green pricing

S/N	Green Pricing Items	General Managers 53 $\overline{X}_1$	SD_1	Marketing Directors 59 $\overline{X}_2$	SD_2	Mean Set $\overline{X}_1\ \overline{X}_2$	SD Set SD_1SD_2	Remarks
9.	Additional or extra charges are attached to our environmentally responsible products in exchange for the value added.	3.24	1.18	3.53	1.27	3.39	1.23	Accepted

10.	My company has produced products that were more expensive but saved energy.	3.28	1.21	3.11	1.13	3.20	1.17	Accepted
11.	Most of our customers are contended with the additional charges placed on our green products due to the value added.	2.46	0.76	2.32	0.69	2.39	0.73	Rejected
12.	Some of our customers complain over the additional charges placed on our green products.	3.41	1.32	3.14	1.07	3.28	1.20	Accepted
13.	Many of our customers have switched from our green products to alternate products due to the high prices of our green products.	3.28	1.22	3.07	0.94	3.18	1.08	Accepted
14.	Despite the high prices of our green products, customers who are environmental concerns still patronize our products.	3.22	1.19	3.31	1.29	3.27	1.24	Accepted
	Grand Mean/SD	**3.15**	**1.15**	**3.08**	**1.07**	**3.12**	**1.11**	

Table 4.4 shows the mean responses of general managers and marketing directors on green pricing. From the table, it is observed that both managers and marketing directors agreed on the items 9, 10, 12, 13 and 14 listed in the table, with mean scores greater than the criterion mean of 3.00 while they disagreed with item 11 listed in the table, with its mean score less than 3.00.

Table 4.5: Mean scores of general managers and marketing directors on green promotion

S/N	Green Promotion Items	General Managers 53 $\overline{X}_1$	SD_1	Marketing Directors 59 $\overline{X}_2$	SD_2	Mean Set $\overline{X}_1\,\overline{X}_2$	SD Set SD_1SD_2	Remarks
15.	My company's promotional activities have minimum negative impact on the environment.	3.12	1.21	3.33	1.24	3.23	1.23	Accepted
16.	My company aimed at eliminating unwholesome promotional activities and stress on environmental sustainability and good quality of life.	3.10	1.26	3.41	1.36	3.26	1.31	Accepted

17.	My company does not carry our conventional advertisements in the form of bill boards, banners, posters and handbills pasted on popular structures such as bridges, flyovers and buildings in areas of high traffic due to environmental reasons.	3.12	1.05	3.24	1.14	3.18	1.10	Accepted
18.	I believe that pasting handbills and posters on popular structures such as bridges, flyovers and buildings in areas of high traffic could be very untidy for environmental sustainability.	3.20	1.23	3.06	1.04	3.13	1.14	Accepted
19.	The main reason why our company does not advertise in banners, handbills and posters pasted on popular structures is because when these materials are carried away by wind and dumped in filthy and muddy water on the road, it causes environmental pollution.	3.11	1.17	3.11	1.09	3.11	1.13	Accepted
	Grand Mean/SD	**3.13**	**1.18**	**3.23**	**1.17**	**3.18**	**1.18**	

Table 4.5 shows the mean responses of general managers and marketing directors on green promotion. From the table, it is observed that both general managers and marketing directors agreed on the items listed in the table, with their mean scores greater than the criterion mean of 3.00. The grand mean scores of 3.13 and 3.23 for general managers and marketing directors respectively are greater than criterion mean of 3.00 which implies that both general managers and marketing directors accepted the items in the table.

Table 4.6: Mean scores of general managers and marketing directors on green distribution

S/N	Green Distribution Items	General Managers 53 $\overline{X}_1$	SD_1	Marketing Directors 59 $\overline{X}_2$	SD_2	Mean Set $\overline{X}_1\,\overline{X}_2$	SD Set SD_1SD_2	Remarks
20.	My company's distribution system promotes environmental sustainability.	3.36	1.21	3.27	1.18	3.32	1.20	Accepted
21.	My company has environmental issue in mind while selecting its vehicles and trucks to distribute its products.	3.18	1.24	3.10	1.06	3.14	1.15	Accepted
22.	My company does not use smoking vehicles and trucks on the highways in distributing its products.	3.31	1.15	3.14	1.10	3.23	1.13	Accepted
23.	Smoking vehicles and trucks on our highways used in product distribution can cause different forms of pollution to the environment and unhealthy living to the people.	3.17	1.18	3.21	1.22	3.19	1.20	Accepted
24.	My company ensures that its vehicles and trucks used in the distribution of its products are in proper shape to avoid breakdown of vehicles.	3.23	1.21	3.11	1.13	3.17	1.17	Accepted
25.	The breakdown of vehicles while transporting goods causes environmental concerns.	3.20	1.13	3.04	1.02	3.12	1.08	Accepted
	Grand Mean/SD	**3.24**	**1.19**	**3.15**	**1.12**	**3.20**	**1.16**	

Table 4.6 shows the mean responses of general managers and marketing directors on green distribution. From the table, it is observed that both general managers and marketing directors agreed on the items listed in the table, with their mean scores greater than the criterion mean of 3.00. The grand mean scores of 3.24 and 3.15 for general managers and marketing directors respectively are greater than criterion mean of 3.00 which implies that both general managers and marketing directors accepted the items in the table.

Table 4.7: Mean scores of general managers and marketing directors on sustainability

S/N	Sustainability Items	General Managers 53		Marketing Directors 59		Mean Set	SD Set	Remarks
		$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	$\overline{X}_1\,\overline{X}_2$	SD_1SD_2	
26	I feel that it is important for us to preserve our natural resources and environment in the course of doing business.	3.31	1.30	3.24	1.20	3.28	1.25	Accepted
27	I intend to maintain and preserve our natural resources and environment from all forms of pollution.	3.29	1.26	3.10	1.12	3.20	1.19	Accepted
28	Keeping our environment sustainable requires the practice of green marketing initiatives.	3.35	1.34	3.17	1.16	3.26	1.25	Accepted
29	I think that every company should have an environmental policy to ensure environmental sustainability.	3.28	1.24	3.20	1.11	3.24	1.18	Accepted
30	I think every company should have an environmental management system.	3.48	1.39	3.28	1.04	3.38	1.22	Accepted
31	Continuing economic growth is compatible with environmental sustainability.	3.38	1.31	3.11	1.09	3.25	1.20	Accepted
	Grand Mean/SD	**3.34**	**1.31**	**3.18**	**1.12**	**3.27**	**1.22**	

Table 4.7 shows the mean responses of general managers and marketing directors on sustainability. From the table, it is observed that both general managers and marketing directors agreed on the items listed in the table, with their mean scores greater than the criterion mean of 3.00. The grand mean scores of 3.34 and 3.18 for general managers and marketing directors respectively are greater than criterion mean of 3.00 which implies that both general managers and marketing directors accepted the items in the table.

Table 4.8: Mean scores of marketing professionals (lecturers) on sustainable consumption

S/N	Sustainable consumption Items	Marketing Professionals N= 35 $\bar{X}$	SD	Remarks
1.	Environmental protection is important to me when making purchases.	3.21	1.32	Accepted
2.	I have switched products for environmental reasons.	3.18	1.24	Accepted
3.	I buy products which are less harmful to the environment.	3.15	1.20	Accepted
4.	I always purchase products which contribute the least amount of pollution.	3.22	1.22	Accepted
5.	I buy products packaged in reusable containers.	3.28	1.16	Accepted
6.	I always patronize light bulbs that are more expensive but saved energy.	2.94	1.12	Rejected
7.	I will continue to buy green products even if I have to pay more.	2.91	1.08	Rejected
8.	It is my firm belief that my purchasing behaviour of green products can alleviate environmental problems.	3.22	1.21	Accepted
	Grand Mean/SD	**3.14**	**1.19**	

Table 4.8 shows the mean responses of marketing professionals on sustainable consumption. From the table, it is observed that marketing professionals sampled across the six states in the south-south region agreed on items 1-5 and 8 listed in the table, with their mean scores greater than the criterion mean of 3.00 while they disagreed with item 6 and 7 listed in the table with their mean scores less than 3.00.

Table 4.9: Mean scores of NGOs on sustainable consumption

S/N	Sustainable consumption Items	NGOs N = 28 $\bar{X}$	SD	Remarks
1.	Environmental protection is important to me when making purchases.	3.11	1.19	Accepted
2.	I have switched products for environmental reasons.	2.93	1.14	Rejected
3.	I buy products which are less harmful to the environment.	3.09	1.15	Accepted

4.	I always purchase products which contribute the least amount of pollution.	3.04	1.10	Accepted
5.	I buy products packaged in reusable containers.	3.13	1.21	Accepted
6.	I always patronize light bulbs that are more expensive but saved energy.	2.86	0.69	Rejected
7.	I will continue to buy green products even if I have to pay more.	2.78	0.61	Rejected
8.	It is my firm belief that my purchasing behaviour of green products can alleviate environmental problems.	3.08	1.16	Accepted
	Grand Mean/SD	**3.00**	**1.03**	

Table 4.9 contains the mean responses of NGOs on sustainable consumption. From the table, it is observed that the respondents agreed on items 1,3,4,5 and 8 listed in the table, with their mean scores greater than the criterion mean of 3.00 while they disagreed with item 2, 6 and 7 listed in the table with their mean scores less than 3.00.

Table 4.10: Mean scores of civil servants on sustainable consumption

S/N	Sustainable consumption Items	Civil Servants N = 51 $\bar{X}$	SD	Remarks
1.	Environmental protection is important to me when making purchases.	3.06	1.02	Accepted
2.	I have switched products for environmental reasons.	3.00	1.00	Accepted
3.	I buy products which are less harmful to the environment.	3.04	0.91	Accepted
4.	I always purchase products which contribute the least amount of pollution.	3.00	0.87	Accepted
5.	I buy products packaged in reusable containers.	2.85	0.81	Rejected
6.	I always patronize light bulbs that are more expensive but saved energy.	2.74	0.73	Rejected
7.	I will continue to buy green products even if I have to pay more.	2.58	0.69	Rejected
8.	It is my firm belief that my purchasing behaviour of green products can alleviate environmental problems.	3.00	1.00	Accepted
	Grand Mean/SD	**2.91**	**0.88**	

Table 4.10 shows the mean responses of civil servants on sustainable consumption. From the table, it is observed that civil servants agreed on the items 1-4 and 8 listed in the table, with their mean scores greater than the criterion mean of 3.00 while they disagreed with item 5-7 listed in the table with their mean scores less than 3.00.

Table 4.11: Mean scores of labourers on sustainable consumption

S/N	Sustainable consumption Items	Labourers N = 43 $\overline{X}$	SD	Remarks
1.	Environmental protection is important to me when making purchases.	3.00	1.26	Accepted
2.	I have switched products for environmental reasons.	2.67	1.20	Rejected
3.	I buy products which are less harmful to the environment.	2.76	0.72	Rejected
4.	I always purchase products which contribute the least amount of pollution.	3.19	0.97	Accepted
5.	I buy products packaged in reusable containers.	3.15	1.08	Accepted
6.	I always patronize light bulbs that are more expensive but saved energy.	2.31	0.43	Rejected
7.	I will continue to buy green products even if I have to pay more.	2.20	0.57	Rejected
8.	It is my firm belief that my purchasing behaviour of green products can alleviate environmental problems.	3.06	1.28	Accepted
	Grand Mean/SD	**2.79**	**0.94**	

Table 4.11 shows the mean responses of labourers on sustainable consumption. The table indicates that labourers agreed on the items 1,4,5 and 8 listed in the table, with their mean scores greater than the criterion mean of 3.00 while they disagreed with item 2,3,6 and 7 listed in the table with their mean scores less than 3.00.

Table 4.12: Mean scores of market sellers on sustainable consumption

S/N	Sustainable consumption Items	Market Sellers N = 56 $\bar{X}$	SD	Remarks
1.	Environmental protection is important to me when making purchases.	2.97	0.63	Rejected
2.	I have switched products for environmental reasons.	2.53	0.56	Rejected
3.	I buy products which are less harmful to the environment.	3.02	1.27	Accepted
4.	I always purchase products which contribute the least amount of pollution.	2.66	0.64	Rejected
5.	I buy products packaged in reusable containers.	3.12	1.23	Accepted
6.	I usually buy energy saving light bulbs despite the fact that they are more expensive compared to other bulbs.	2.31	0.66	Rejected
7.	I will continue to buy green products even if I have to pay more.	2.12	0.45	Rejected
8.	It is my firm belief that my purchasing behaviour of green products can alleviate environmental problems.	2.26	0.62	Rejected
	Grand Mean/SD	**2.62**	**0.76**	

Table 4.12 shows the mean responses of market sellers on sustainable consumption. From the table, it could be observed that the respondents agreed on the items 3 and 5 listed in the table, with their mean scores greater than the criterion mean of 3.00 while they disagreed with item 1,2,4,6,7 and 8 listed in the table with their mean scores less than 3.00.

Table 4.13: Grand mean and standard deviation of consumers' responses on sustainable consumption

S/N	Consumers	Sustainable Consumption $\bar{X}$	SD
1.	Marketing Professionals	3.14	1.19
2.	NGOs	3.00	1.03
3.	Civil Servants	2.91	0.88
4.	Labourers	2.79	0.94
5.	Market Sellers	2.62	0.76

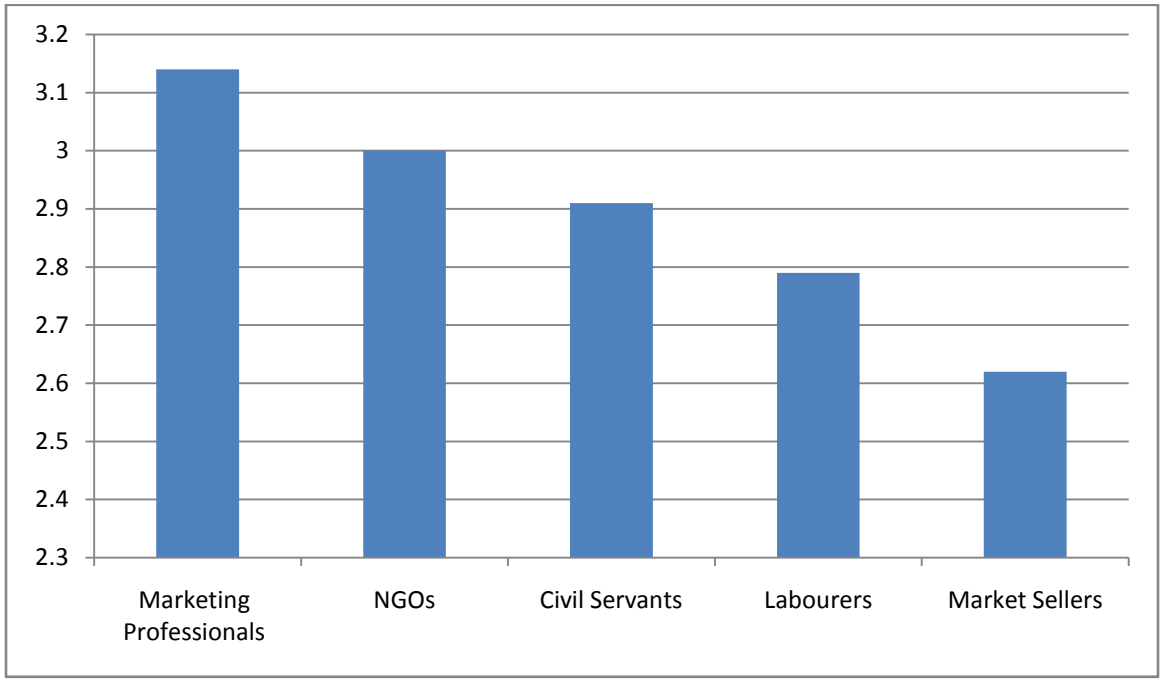

Fig 6: Grand mean responses of the consumers on sustainable consumption

Table 4.13 and figure 6 show the grand mean responses of the consumers on sustainable consumption. The figure illustrates that marketing professionals have the highest grand mean responses on sustainable consumption with 3.14, followed by NGOs with a grand mean of 3.00. Civil servants took the third spot with a grand mean of 2.91. The fourth position was occupied by labourers with a grand mean of 2.79, while market sellers took the fifth spot with the lowest grand mean of 2.62.

4.3 Statistical Analysis

A descriptive and correlation analyses were carried out on the study variables. The descriptive analysis focuses on the grand mean and standard deviation of the study variables while the correlation analysis was carried out to ascertain the type of relationship that exists between the independent and dependent variables. The result of the correlation analysis was used to decide whether to accept or reject the null hypotheses.

Table 4.14: Descriptive Statistics

Variables	N	Min Statistic	Max. statistic	Mean statistic	Std Dev. statistic	Skewness		Kurtosis	
						Statistic	Std Error	Statistic	Std Error
Green Products	364	3.00	5.00	3.22	1.25	1.2710	.491	1.4314	1.834
Green Pricing	364	3.00	5.00	3.12	1.11	1.4931	.491	1.8912	1.834
Green Promotion	364	3.00	5.00	3.18	1.18	1.3490	.491	1.6314	1.834
Green Distribution	364	3.00	5.00	3.20	1.16	1.5912	.491	1.8940	1.834
Sustainable Consumption	364	3.00	5.00	3.14	1.19	1.1251	.491	1.4314	1.834
Sustainability	364	3.00	5.00	3.27	1.22	1.4578	.491	1.8567	1.834

Source: SPSS-generated Output

Table 4.14 presents the descriptive statistics of the study variables. The descriptive statistics show that the data exhibit relatively high values in all variables measured since their mean values are greater than the criterion mean of 3.00. However, the analysis of kurtosis and skewness indicate that the variables are close to normal distribution which implies that the distribution of values is skewed.

Hypothesis One

Ho_1: There is no significant relationship between green products and sustainable consumption in the south-south region of Nigeria.

Table 4.15: Correlation between green products and sustainable consumption

			Green Products	Sustainable Consumption
Spearman's Rho	Green Products	Correlation Coefficient Sig. (2 tailed) N	1.000 . 364	.872** .003 364
	Sustainable Consumption	Correlation Coefficient Sig. (2 tailed) N	.872** .003 364	1.000 . 268

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 4.15 shows that green products is positively correlated to sustainable consumption (rho = .872** p value < 0.05) and significant at 95% confidence level, showing the applicability of the overall result. Hence, the null hypothesis 1 is rejected. This implies that there is significant relationship between green products and sustainable consumption in the south-south region of Nigeria.

Hypothesis Two

Ho_2: There is no significant relationship between green pricing and sustainable consumption in the south-south region of Nigeria.

Table 4.16: Correlation between green pricing and sustainable consumption

			Green Pricing	Sustainable Consumption
Spearman's Rho	Green Pricing	Correlation Coefficient Sig. (2 tailed) N	1.000 . 364	-.478 .002 364
	Sustainable Consumption	Correlation Coefficient Sig. (2 tailed) N	-.478 .002 364	1.000 . 364

Correlation is significant at 0.01 levels (2 tailed)
Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 4.16 shows that green pricing is negatively correlated to sustainable consumption (rho = -.478 p-value < 0.05) and insignificant at 95% confidence level, showing the non-applicability of the overall result. Hence, the null hypothesis 2 is accepted. This means that we then accept that there is no significant relationship between green pricing and sustainable consumption in the south-south region of Nigeria.

Hypothesis Three

Ho_3: There is no significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria.

Table 4.17: Correlation between green promotion and sustainable consumption

			Green Promotion	Sustainable Consumption
Spearman's Rho	Green Promotion	Correlation Coefficient Sig. (2 tailed) N	1.000 . 364	.786** .002 364
	Sustainable Consumption	Correlation Coefficient Sig. (2 tailed) N	.786** .002 364	1.000 . 364

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 4.17 shows that green promotion is positively correlated to sustainable consumption (rho = .786** p value < 0.05) and significant at 95% confidence level. Therefore, the null hypothesis 3 is rejected and the alternate hypothesis which states that "there is significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria" was accepted.

Hypothesis Four

Ho_4: There is no significant relationship between green distribution and sustainable consumption in the south-south region of Nigeria.

Table 4.18: Correlation between green distribution and sustainable consumption

			Green Distribution	Sustainable Consumption
Spearman's Rho	Green Distribution	Correlation Coefficient Sig. (2 tailed) N	1.000 . 268	.788** .001 364
	Sustainable Consumption	Correlation Coefficient Sig. (2 tailed) N	.788** .001 364	1.000 . 364

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 4.18 shows that green distribution is positively correlated to sustainable consumption (rho = .788** p value < 0.05) and significant at 95% confidence level, showing the applicability of the overall result. Hence, the null hypothesis 4 is rejected. This means that we then accept the alternate hypothesis which states that there is significant

relationship between green distribution and sustainable consumption in the south-south region of Nigeria.

Hypothesis Five

Ho_5: Sustainability does not significantly moderate the relationship between green marketing and sustainable consumption in the south-south region of Nigeria.

Table 4.19: Correlation between sustainability, green marketing and sustainable consumption

			Sustainability	Green Marketing	Sustainable Consumption
Spearman's Rho	Sustainability	Correlation Coefficient	1.000	.641**	.467**
		Sig. (2 tailed)	.	.001	.002
		N	364	364	364
	Green Marketing	Correlation Coefficient	.641**	1.000	.579**
		Sig. (2 tailed)	.001	.	.002
		N	364	364	364
	Sustainable Consumption	Correlation Coefficient	.467**	.579**	1.000
		Sig. (2 tailed)	.002	.002	.
		N	364	364	364

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 4.19 shows that sustainability positively moderates the relationship between green marketing and sustainable consumption (rho = .641** p value < 0.05) (rho = .467** p value < 0.05) which is significant at 95% confidence level. Hence, the null hypothesis 5 is rejected. This means that we then accept the alternate hypothesis which states that sustainability significantly moderate the relationship between green

marketing and sustainable consumption in the south-south region of Nigeria.

4.4 Discussion of Findings

From the results of the analysis carried out, it was discovered that there is significant relationship between green products and sustainable consumption in the south-south region of Nigeria. This finding was derived from the result of the statistical testing carried out on hypothesis one. The result of the statistical testing revealed that green products is positively correlated to sustainable consumption (rho = .872** p value < 0.05) and significant at 95% confidence level. As a result of this, the null hypothesis was rejected and the alternate hypothesis which states that there is significant relationship between green products and sustainable consumption in the south-south region of Nigeria. This finding is supported by the research conducted by Balderjahn (1988) which reported that green products significantly help to engage consumers to sustainable consumption in less developed countries. Luzio & Lemke (2013) also supported this finding as they reported that green products significantly encourage sustainable consumption in developed countries.

It was discovered in this study that no significant relationship exists between green pricing and sustainable consumption in the south-south region of Nigeria. This finding was derived from the result of the

statistical testing carried out on the second hypothesis. The empirical result revealed that green pricing is negatively correlated to sustainable consumption (rho = -.478 p value < 0.05) and insignificant at 95% confidence level. Based on this result, the null hypothesis was accepted. This implies that we then accept that there is no significant relationship between green pricing and sustainable consumption in the south-south region of Nigeria. This finding explains the fact that many Nigerian consumers are discouraged from patronizing green products simply because of the additional charges that is attached to the products in exchange for the value added. Many Nigerian consumers complain over the additional charges placed on our green products. Some of them have even switched from green products to alternate products due to the high prices of green products. This finding is in line with the research conducted by Awan (2011) which reported that green pricing significantly discourage sustainable consumption in Sweden. Cheah & Phau (2011) also confirmed this finding when they reported that consumers are discouraged from patronizing green products due to the additional charges placed on the products. Bancheva (2009) also supported this finding when he reported that sustainable consumption is greatly hindered by the high prices attached to green products.

This study found a significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria. This finding was derived from the result of the statistical testing carried out on the third hypothesis. The result revealed that green promotion is positively correlated to sustainable consumption (rho = .786** p value < 0.05) and significant at 95% confidence level. As a result of this, the null hypothesis was rejected and the alternate hypothesis which states that "there is significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria" was accepted. This finding is consistent with the research conducted by Alsmadi (2007) which reported that green promotion significantly helps to facilitate sustainable consumption among Jordanian consumers. The study conducted by D'Souza, Taghian & Lamb (2006) also confirmed this finding as it revealed that green promotion positively and significantly encourage sustainable consumption. Chan (2004) also supported this finding as his study reported that consumer respond positively to environmental advertising in China.

It was revealed in this study that significant relationship exists between green distribution and sustainable consumption in the south-south region of Nigeria. This finding was derived from the result of the statistical testing carried out on the fourth hypothesis. The empirical

result indicated that green distribution is positively correlated to sustainable consumption (rho = .788** p value < 0.05) and significant at 95% confidence level. Based on this result, the null hypothesis was rejected and the alternate hypothesis was accepted. This implies that there is significant relationship between green distribution and sustainable consumption in the south-south region of Nigeria. This finding is supported by Stein & Knootz (2009) as their study revealed that green distribution is positively and significantly related to sustainable consumption. Sanjay & Gurmet (2004) also supported this finding as they reported that India consumers are encouraged to engage in sustainable consumption due to the practices of green distribution by companies.

Finally, it was discovered that sustainability significantly moderates the relationship between green distribution and sustainable consumption in the south-south region of Nigeria. This finding was derived from the result of the statistical testing carried out on the fifth hypothesis. The empirical result showed that sustainability positively moderates the relationship between green marketing and sustainable consumption (rho = .641** p value < 0.05) (rho = .467** p value < 0.05) which is significant at 95% confidence level. As a result of this, the null hypothesis was rejected and the alternate hypothesis was accepted. This means that

sustainability significantly moderate the relationship between green marketing and sustainable consumption in the south-south region of Nigeria. This finding is supported by Agyemn (2005), Alsmadi (2007), Saxena & Khandelwal (2010), and Zaman, Miliutenko & Nagaptan (2010) as they all argued in one direction that achieving sustainability is the core factor behind green marketing practices and sustainable consumption.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

This study examined the relationship between green marketing and sustainable consumption in the south-south region of Nigeria. Based on the result of the analysis carried out, the findings include:

1. That, there is significant relationship between green products and sustainable consumption in the south-south region of Nigeria.
2. That, there is no significant relationship between green pricing and sustainable consumption in the south-south region of Nigeria.
3. That, there is significant relationship between green promotion and sustainable consumption in the south-south region of Nigeria.
4. That, there is significant relationship between green distribution and sustainable consumption in the south-south region of Nigeria.
5. Finally, it was discovered that sustainability significantly moderates the relationship between green distribution and sustainable consumption.

5.2 Conclusion

Given the controversy among scholars and researchers regarding the exact nature of relationship between green marketing and sustainable consumption, the empirical results of this study succinctly demonstrate

that, within Nigerian context, green products were found to have a significant relationship to sustainable consumption. The study also found a negative and insignificant relationship between green pricing and sustainable consumption. Green promotion and green distribution were found to have a significant relationship to sustainable consumption. Furthermore it was revealed that sustainability significantly moderates the relationship between green distribution and sustainable consumption in Nigeria. Based on this result, it was concluded that green marketing influence sustainable consumption in the south-south region of Nigeria.

5.3 Recommendations

Based on the above findings and conclusions, the following recommendations are made:

1. That, industrial (manufacturing) companies operating in Nigeria should switch from conventional marketing to green marketing as it would enhance sustainable consumption in Nigeria.
2. That, manufacturing companies in Nigeria especially those in the south-south region should produce only green products (organic, non-toxic and bio-degradable products) and package them in recyclable and reusable containers as this would not only enhance environmental sustainability but also encourage sustainable consumption in Nigeria.

3. That, in order to encourage sustainable consumption in Nigeria, industrial companies should not attach higher prices to their green products in exchange for the value added.
4. That, SMEs and Churches in Nigeria particularly those in the south-south region should deviate from the conventional advertisements in the form of banners, posters and handbills pasted on popular structures such as bridges, flyovers and buildings and engage in green promotion (promotional activities with no negative impact on the environment). This can be done by using the electronic news media such as the television and radio media to advertise their products and programmes. This medium would enhance environmental sustainability in Nigeria.
5. That, small business operators in the south-south region of Nigeria should practice green distribution and do away with other distribution practices that endanger the natural environment. They should desist from using smoking vehicles and trucks in distributing their products so as to prevent pollution to the environment and unhealthy living to the people.
6. That, manufacturing SMEs especially those using unhealthy vehicles to distribute their products should stop doing so to avoid

breakdown of vehicles on the road. The breakdown of vehicles on the road is a source of concern to the environment.

7. That, the Media should collaborate with environmentalists in Nigeria in encouraging the general public to patronage only green products as this would force companies operating in the country to embrace green marketing concept.
8. That, the Federal Government should put more pressure on manufacturing companies to embrace green marketing. This can be done by enacting laws that will make it mandatory for companies to produce only environmentally responsive products.
9. The government should also put in place a mandatory environmental legislation that will force behavioral changes in consumers.

5.4 Suggestions for Further Studies

1. Since this study was conducted in the south-south region of Nigeria, therefore, it is suggested that further studies on this topic should be carried out in other geopolitical zones of Nigeria (such as North Central, North-East, North-West, South-East, and South-West) to determine if there is any discrepancy in research findings on the basis of different geopolitical zones.

2. Further studies should evaluate the practices of green marketing in the oil and gas industry in Nigeria specifically in the Niger Delta (south-south) region of Nigeria.
3. Further research should compare the practices of green marketing in private and public sector organizations to see if the type of sector or organization determines the extent of green marketing practices in Nigeria.

5.5 Contribution to Knowledge

The study has contributed to knowledge in three major dimensions. First, the available empirical studies reviewed in the course of this study indicate that no empirical study has been carried out on green marketing and sustainable consumption in the south-south region of Nigeria. Therefore, this study has contributed to knowledge by providing statistical and empirical evidence on the relationship between green marketing and sustainable consumption in the south-south region of Nigeria. This empirical evidence would provide a guide to policymakers and government on their environmental policies especially those ones that aimed at achieving environmental sustainability.

Secondly, it was observed that most of the studies conducted on green marketing and sustainable consumption in other parts of the world (e.g. Juwaheer *et al*, 2012; Ongisa, 2013; Singh & Pandey; 2012; Park and

Ha, 2012) do not specifically relate each components of green marketing (green products, green pricing, green promotion, green distribution) to sustainable consumption rather the two concepts were treated separated. Hence, this study has contributed to knowledge by relating each components of green marketing (green products, green pricing, green promotion, green distribution) to sustainable consumption.

Finally, none of the empirical studies reviewed used sustainability as a moderating variable between green marketing and sustainable consumption. Therefore, this study has added to the existing knowledge by using sustainability to moderate the relationship between green marketing and sustainable consumption.

REFERENCES

Agyeman, J. (2005). *Sustainable Communities and the Challenge of Environmental Justice*. New York: New York University Press.

Alsmadi, S. (2007). Green Marketing and the Concern over the Environment: Measuring Environmental Consciousness of Jordanian Consumers. *Journal of Promotion Management*, 13(3 – 4): 234-265.

Asongu, J.J. (2007). The Legitimacy of Strategic Corportae Social Responsibility as a Marketing Tool. *Journal of Business and Public Policy*, 1(2): 144-163.

Awan, U. (2011). Green Marketing: Marketing Strategies for the Swedish Energy Companies. *International Journal of Industrial Marketing*, 1(2): 271-298.

Balderjahn, A. (1988). Relationship between Environmentally Conscious Attitudes and the Use of Green Products. In N. I. Ibok & S. G. Etuk (Eds.). Socio-Economic and Demographic Determinants of Green Consumption. *International Journal of Managerial Studies and Research,* 2 (Issue 9), 49.

Bancheva, A. (2009). Green Marketing: How it helps to Engage Consumers to Sustainable Consumption. Russian State University of Humanities, Russia.

Baridam, D. M. (2001). *Research Methods in Administrative Science* (3rd Ed). Port Harcourt: Shedrack Publishers.

Barry, Brian. (2007). Sustainability and Intergenerational Justice. *Theoria*, *45*, 43–65.

Belz, F. & Peattie, K.(2009). *Sustainability Marketing: A Global Perspective.*New York: John Wiley & Sons.

Bentley, M. & de Leeuw, B. (2000). *Sustainable Consumption Indicators*. Report for UNEP DTIE. Paris: United Nations Environmental Program.

Birtwistle, G. & Moore, C. M. (2007). Fashion Clothing – Where Does it All End Up? In P. S. Dimitrova (2010). Sustainable Consumption: Literature Review on Sustainable Consumption Practices and the Attitude-Behaviour Gap. B.Sc. Thesis, Department of Marketing and Statistics, Aarhus University.

Chan, R. Y. K. (2004), Consumer Responses to Environmental Advertising in China. *Marketing Intelligence and Planning*, 22(4), 427 – 437.

Charkiewicz, E., van Bennekom, S. & Young, A. (2001). *Transitions to Sustainable Consumption and Production*. The Hague: Tools for Transition.

Cheah, I. & Phau, I. (2011). "Attitudes Towards Environmentally Friendly Products: The Influence of Ecoliteracy, Interpersonal Influence and Value Orientation." *Marketing Intelligence and Planning*, 29 (5), pp. 452-472.

Christensen, P. D. (1995), "The Environment: It's Not Time to Relax." *McKinsey Quarterly*, Vol. 4.

Clarke, G. (2004). "Understanding Green Consumer Behaviour." *Journal of Consumer Behaviour*, 4(2), pp. 73 – 79.

Daly, H. (1998). "Consumption: The Economics of Value Added and the Ethics of Value Distributed." In W. Laura, and P. Werhane (eds.). *The Business of Consumption*. Maryland: Rowman & Littelfield.

Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R. & Bohlen, G.M. (2003). "Can Socio-Demographics Still Play a Role in Profiling Green Consumers? A Review of the Evidence and An Empirical Investigation." *Journal of Business Research*, 56 (6), pp. 465-480.

Dimitrova, P. S. (2010). Sustainable Consumption: Literature Review on Sustainable Consumption Practices and the Attitude-Behaviour Gap. B.Sc. Thesis, Department of Marketing and Statistics, Aarhus University.

Dodds, J. (2006). "Green Marketing 101". Retrieved January 2008.

Donaldson, R. H. (2005). Green brands, NZ Marketing Magazine, 24(8), 14–17.

Drexhage, J. & Mulphy, D. (2010). Sustainable Development: From Brundtland to Rio 2012. Background Paper Prepared for Consideration by the High Level Panel on Global Sustainability at its First Meeting, 19th September, 2010.United Nations, International Institute for Sustainable Development (IISD).

D'Souza, C., Taghian, M. & Lamb, P. (2006). "An Empirical Study on the Influence of Environmental Labels on Consumers." *International Journal of Corporate Communications*, 11 (2), pp. 162-173

Eisenhart, T. (1990). There is Gold in that Garbage. Business Marketing, (November), pp 24.

Environmental Protection Agency (EPA) (2000), "State and Local Government Pioneers: How State and Local Governments Are Implementing Environmentally Preferable Purchasing.

Evans, D. & Jackson, T. (2008). Sustainable Consumption: Perspectives from Social and Cultural Theory. *RESOLVE Working Paper 05-08*, University of Surrey, Guildford, GU2 7XH, UK.

Fowler, G. (2002). "Green Sales Pitch Isn't Moving Many Products". Wall Street Journal, p 3-6.

Friedman, T. L. (2007). The Power of Green. *The New York Times,* April 15.

Fuchs, D. A. & Lorek, S. (2004). Sustainable Consumption: Political Debate and Actual Impact. *Sustainable Europe Research Institute (SERI)*, Vienna, Austria.

Glaser, P.S.(2009).Green Power Marketing Claims: A Free Ride on Conventional Power? *Electricity Journal*, 12(6): 32-40.

Hailes, J. (2007). *The New Green Consumer Guide Somerset*. New Jersey: Simon and Schuster.

Hakansson, H. & Waluszewsk, A. (2005). Developing a New Understanding of Markets: Reinterpreting the 4Ps. *Journal of Business & Industrial Marketing*, 20(3): 110-117.

Hasna, A. M. (2007). Dimensions of Sustainability. *Journal of Engineering for Sustainable Development: Energy, Environment, and Health* 2 (1): 47–57.

Heal, G. (2009). Climate Economics: A Meta-Review and Some Suggestions for Future Research. *Review of Environmental Economics and Policy,* 3(1): 4 – 21.

Henion, E. & Kinnear, T. C. (2006). A Guide to Ecological Marketing in Ecological Marketing, Chicago: American Marketing Association.

Henion, K. E. & Kinnear, T. C. (1976). "Ecological Marketing". American Marketing Association, p. 168.

Herrmann, G. A. (2007). Welcome Address BioFach China. Shanghai, Trade Fair and Conference 2007, In R. Wang (ed.) Sustainable Consumption from the Consumer's Perspective: A Study on the Purchase Intention of Green Food in China, Masters Degree Thesis, University of Bedfordshire.

Holt, E. A. & Holt, M.S. (2004). Green Pricing Resources Guide. American Wind Energy Association, Washington DC.

Ibok, N. I. & Etuk, S. G. (2014). Socio-Economic and Demographic Determinants of Green Consumption. *International Journal of Managerial Studies and Research,* 2 (Issue 9), 47-56.

Jonas, H. (2004). *The Imperative of Responsibility*. Chicago: University of Chicago Press.

Juwaheer, T., Pudaruth, S. & Noyaux, M. (2012). "Analyzing the Impact of Green Marketing Strategies on Consumer Purchasing Patterns in Mauritius." *World Journal of Entrepreneurship Management and Sustainable Development*, 8 (1), pp. 36-59.

Kinoti, W. M. (2011). Green Marketing Intervention Strategies and Sustainable Development: A Conceptual Paper Mary Wanjiru Kinoti University of Nairobi, School of Business Nairobi, Kenya. *International Journal of Business and Social Science, 2 (23) (Special Issue – December 2011).*

Kotler, P., Armstrong, G., Saunders, J. & Wong, V. (1999). Principles of Marketing (2nd Ed.). London: Pearson Education Limited.

Kotler, P. (2009). Marketing Management: The Millennium Edition. New Delhi: Prentice Hall of India Private Limited.

Kreidler, N. B. & Joseph, M. S. (2009). How Green Should You Go? Understanding the Role of Green Atmospherics in Service Environment Evaluations. *International Journal of Culture, Tourism and Hospitality Research*, 3(3), 228-245.

Laroche, M., Bergeron, J. & Barbaro-Forleo, G. (2001). "Targeting Consumers Who Are Willing to Pay More for Environmentally Friendly Products." *Journal of Consumer Marketing*, 18 (6), pp. 503-520.

Leadership Council of the Sustainable Development Solutions Network (2013). An Action Agenda for Sustainable Development. Report for the UN Secretary-General, 6 June 2013. UR: www.unsdsn.org. Retrieved: December 28, 2013.

Leonidou, L. C., Leonidou, C. N., Palihawadana, D. & Hultman, M. (2011). "Evaluating the Green Advertising Practices of International Firms: A Trend Analysis." *International Marketing Review*, 28 (1), pp. 6-33.

Lorek, S. & Fuchs, D. (2013). Strong Sustainable Consumption Governance - Precondition for a Degrowth Path. *Journal of Cleaner Production* (38): 36–43.

Luzio, J. & Lemke, F. (2013). "Exploring Green Consumers' Product Demands and Consumption Processes: The Case of Portuguese Green Consumers." *European Business Review*, 25 (3) pp 281-300.

McCarthy, E. Jerome and William D. Perreault (1984). Basic Marketing. Homewood, Illinois: Richard D. Irwin, Inc.

McKenzie, D. (1991). "The Rise of the Green Consumer." *Consumer Policy Review*, 1 (2), pp. 68-75.

Mclntyne, R. P., Meloche, M. S. & Lewis, S. L. (1993). National Culture as a Macro Tool for Environmental Sensitivity Segmentation. In N. I. Ibok, & S. G. Etuk (Eds.). Socio-Economic and Demographic Determinants of Green Consumption. *International Journal of Managerial Studies and Research,* 2 (Issue 9), 49.

Menon, A., Menon, A., Chowdhury, J. & Jankovich, J. (1999). "Evolving Paradigm for Environmental Sensitivity in Marketing Programs: A Synthesis of Theory and Practice." *Journal of Marketing Theory and Practice*, 7 (2) pp. 1-15.

Ministry of the Environment (1994). *Symposium Sustainable Consumption*. Oslo: Ministry of the Environment Norway.

Mintu, A. T. & Lozada, R.R. (2008). Green Marketing Education: A Call for Action. Marketing Education Review, 26(2): 432-461.

Nachmias, D. & Nachmias, C. (1976).*Research Methods in Social Sciences.* London: Edward Arnold.

Nicola, M. & Polonsky, M. J. (1995). Using Strategic Alliances to Develop Credible Green Marketing. *Journal of Consumer Marketing,* 12 (2): 4–18.

Nwankwo, O.C. (2013). *A Practical Guide to Research Writing for Students of Research Enterprise* (Revised 5th Ed). Port Harcourt: University of Port Harcourt Press Ltd.

Ohman, J. (1998). Green Marketing: Opportunity for Innovation. Chicago: Lincoin Wood Press.

Ongisa, F. (2013). The Disconnect Between Green Marketing and Green Consumption: A Case Study Of Kisii County, Kenya. *IOSR Journal of Business and Management,* Vol. 13 (Issue 5): 30-33.

Ott, K. (2003). "The Case for Strong Sustainability." In K. Ott, & P. Thapa (eds.) (2003).Greifswald's Environmental Ethics. Greifswald: Steinbecker Verlag Ulrich Rose.

Ottaman, J. A (1998). *Green Marketing: Opportunities for Innovation*. Illinois: NTC: Lincolnwood.

Park, J. & Ha, S. (2012). "Understanding Pro-environmental Behavior: A Comparison of Sustainable Consumers and Apathetic Consumers." *International Journal of Retail and Distribution Management*, 40 (5), 388-403.

Pearce, D., Barbier, E. & Markandya, A. (2009). *Blueprint for a Green Economy*. London: Earthscan.

Peattie, K. & Crane. A. (2005). Green Marketing: Legend, Myth, Farce or Prophesy? Qualitative Market Research, 8(4): 357-370.

Pittavachawan, S., Abareshi, A., Kam,B.H. & Teo, L.K.Y. (2014). Green consumerism: A study on the prospect of consumers participation in corporate environmental management programs. *ResearchGate,* 670-678.

Plumwood, V. (2012). *Environmental Culture: The Ecological Crisis of Reason*. New York: Routledge.

Polonsky, M. (2001). Reevaluating Green Marketing: A Strategic Approach. *Business Horizons,* 44(5), Sept/Oct, pp. 21-31.

Princen, T. (2001). Consumption and its Externalities: Where Economy Meets Ecology. *Global Environmental Politics,* 1 (3): 11-30.

Princen, T. (2003). "Principles for Sustainability: From Cooperation and Efficiency to Sufficiency." *Global Environmental Politics,* 3(1): 33-50.

Reizenstein, R. C. Hills, G. E. and Philp, J. W. (1974). Willingness to Pay for Control of Air Pollution: A Demographic Analysis. In N. I. Ibok & S. G. Etuk (Eds.). Socio-Economic and Demographic Determinants of Green Consumption. *International Journal of Managerial Studies and Research,* 2 (Issue 9), 49.

Robinson, J. (2004). Squaring the Circle? Some Thoughts on the Idea of Sustainable Development. *Ecological Economics*, *48*, 369–384.

Rolson, H. (2004). *Conserving Natural Value*. New York: Columbia University Press.

Saha, M. & Darton, G. (2005). Green Companies: Are Companies Really Green, Or Are They Pretending to Be? Business and Society Review.

Sanjay, K. J. & Gurmet, K. (2004). Green Marketing: An Attitudinal and Behavioural Analysis of Indian Consumers. *Global Business Review*, 5 (2): 187-205.

Sarkar, A. (2012). Green Marketing and Sustainable Development Challenges and Opportunities. *International Journal of Marketing, Financial Services & Management Research*, 1 (Issue 9), September, ISSN 2277 – 3622.

Saxena, R. & Khandelwal, P. K. (2010). Sustainable Development through Green Marketing: The Industry Perspective. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 6 (6): 59-79.

Saxena, R. & Khandelwal, P. K. (2010). Can Green Marketing be used as a tool for Sustainable Growth? A Study Performed on Consumers in India- An Emerging Economy. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 6 (2): 278-291.

Schmidheiny, S. (2002). Business Council for Sustainable Development. Changing Course: A Global Perspective on Development and the Environment. Cambridge, Massachusetts: MIT Press.

SCORE (2008). Sustainable Consumption Research Exchanges, System Innovation for Sustainability 1: Perspectives on Radical Changes to Sustainable Consumption and Production, 2008.

Seyfang, G. (2007). Growing Sustainable Consumption Communities: The Case of Local Organic Food Networks. Centre for Social and Economic Research on the Global Environment (CSERGE), University of East Anglia, Norwich, UK.

Shi, W. (2010). Renewable Energy: Finding Solutions for a Greener Tomorrow. Reviews in Environmental Science and Biotechnology, 9(1): 35-37.

Simula, H., Lehtimark, T. & Salo, J. (2009). Managing Greenness. *Journal of Systems and Information Technology*, 11(4): 331-346.

Singh, P.B. & Pandey, K.K. (2012). Green Marketing: Policies and Practices for Sustainable Development. *Journal of Management,* 5(1): 22 - 30.

Spangenberg, J. & Lorek, S. (2002). "Environmentally Sustainable Household Consumption: from Aggregate Environmental Pressures to Priority Fields of Action." *Ecological Economics,* 43: 127-140.

Stein, F. & Koontz, O. (2009). Green Marketing Trends- Guidance for Widelife Friendly Products to Understand and Access Green Market. http://www.greenbiz.com/files/documents (Accessed 12/11/2013).

Symposium on Sustainable Consumption, Oslo, 1994; UN Commission on Sustainable Development (UNCSD).

Synovate/Aegis, 2007; Synovate/BBC World, 2008.

Szuster, D. (2008). Green Marketing: A Case Study of British Airways. A Master Thesis in Culture, Communication and Globalization at Aalborg University.

Throsby, D. (2008). Linking Cultural and Ecological Sustainability. *International Journal of Diversity in Organizations, Communities and Nations*, 8(1), 15-20.

Uberoi, N. K. (2007). *Environmental Management.* New Delhi: Excel Books.

Unamma, A.O. (2003). *Basic Needs for Development Research – A Hint for University/Distance Learning Scientist,* Owerri: Amandera Educational Services.

United Nations Commission on Sustainable Development. Report on the Third Session (1995.) Economic and Social Council. Official Records, 11-28 April 1995. Supplement No.12. E/1995/32 E/CN.17/1995/36. United Nations, New York, 1995.

United Nations (1995). *Changing Consumption and Production Patterns - Report of the Secretary-General.* New York: United Nations.

United Nations (1993). *Earth Summit: Agenda 21 - the United Nations Programme of Action From Rio.* New York: United Nations.

Vaccaro, L. V. (2009). B2B Green Marketing and Innovation Theory for Competitive Advantage. *Journal of Systems and Information Technology*, 11(4): 315-330.

Velnampy.T & Achchuthan, S. (2016). Green consumerism in Sri Lankan Perspective: An Application and Extension of Theory of Planned Behavior. *Advances in Management & Applied Economics*, 6(5), 39-66.

Wang, R. (2006). Renewable Electricity in Sweden: An Analysis of Policy and Regulations, Energy Policy, 34, 1209-1220.

Wang, R. (2007). Sustainable Consumption from the Consumer's Perspective: A Study on the Purchase Intention of Green Food in China, Master Degree Thesis, University of Bedfordshire.

Welford, R. (2000). *Hijacking Environmentalism*. London: Earthscan.

WBCSD (2008), Sustainable Consumption Fact & Trends from a Business Perspective, 17 Dec 2008.

Wessells, C., Johnston, R. and Donath, H. (1999), "Assessing Consumer Preferences for Ecolabelled Seafood: the Influence of Species, Certified and Household Attributes", American Journal of agricultural Economics, Vol. 81, No. 5, pp. 1084-96.

Wheale, P. & Hinton, D. (2007). "Ethical Consumers in Search of Markets." *Business Strategy and the Environment*, 16 (4), pp. 302-315.

Wheaton, E. (2014). Student Resources. *Pearson,* Pearson Education.

Young, W. (2010). "Sustainable Consumption: Green Consumer Behaviour when Purchasing Products". *Sustainable Development* (18): 20–31.

Zaman, A. U., Miliutenko, S. & Nagaptan, V. (2010). Green Marketing or Green Wash: A Comparative Study of Consumers' Behaviour on Selected Eco and Fair Trade Labelling in Sweden. *Journal of Ecology and Natural Environment*, 2 (6): 104-111.

Zeng Yong, F. & Wei, M. (2009). A Research on Evaluation of Green Marketing Performance Based on Gray System (Management School of Wuhan Technology University, Wuhan, China). Retrieved from sweizeng@public.wh.hb.cn.

Department of Marketing,
Faculty of Management Sciences,
School of Post Graduate Studies,
Nnamdi Azikiwe University, Akwa,
Anambra State.
27th May, 2016.

Dear Sir/Madam,

Request to Complete Questionnaire

I am a post graduate student of the above mentioned university and department. I am required to carry out a research on "Examination of the Relationship between Green Marketing and Sustainable Consumption in the South-South Region of Nigeria". This study is conducted in partial fulfillment of the requirements for the award of PhD degree in Marketing. Therefore, kindly complete the attached questionnaire as it is purely designed for academic purpose. All information would be treated confidentially.

Thanks for your co-operation.

Yours faithfully,

Anucha, Victor Chima

Researcher

APPENDIX 1

(QUESTIONNAIRE)

Instruction: Please answer the following questions sincerely and tick (√) where required.

SECTION A (PERSONAL DATA OF RESPONDENTS)

1. Name of Company: ……

2. Sex:

   (a) Male ☐

   (b) Female ☐

3. Marital Status:

   (a) Single ☐

   (b) Married ☐

   (c) Divorced ☐

   (d) Widower ☐

   (e) Separated ☐

4. Age bracket:

   (a) 18 - 30yrs ☐

   (b) 31 – 40yrs ☐

   (c) 41 – 50yrs ☐

   (d) 51 – 55yrs ☐

   (e) 56yrs and above ☐

5. Working Experience:

   (a) 1 -5yrs ☐

   (b) 6 – 10yrs ☐

   (c) 11 – 15yrs ☐

   (d) 16 – 20yrs ☐

   (e) 21yrs and above ☐

6. Position/status:

(a) General Manager ☐

(b) Marketing Director ☐

7. Highest Academic Qualification:

(a) S.S.C.E/N.E.C.O/G.C.E ☐

(b) ND/N.C.E ☐

(c) B.Sc./B.ED./B.A./H.N.D. ☐

(d) M.Sc./M.ED/M.A./M.B.A. ☐

(e) PhD ☐

SECTION B (CORE SUBJECT MATTER QUESTIONS)

Instruction: Please indicate your reaction to the statements in the box by ticking any of the option in the corresponding box.

Key Interpretation:

SA: Strongly Agree

A : Agree

U: Undecided

D: Disagree

SD: Strongly Disagree

For General Managers and Marketing Directors

S/N	Green Marketing Green Product	5 SA	4 A	3 U	2 D	1 SD
1	I am aware of products which are designed with environmental issue in mind.					
2.	My company produces products with environmental issue in mind.					
3.	My company's products are organic, non-toxic and bio-degradable products.					

4.	My company packages its products in recyclable and reusable containers instead of single serving packages.					
5.	My company packages its products in recyclable and reusable containers for environmental reasons.					
6	Environmentally responsible products are important to save natural resources.					
7	Green products will reduce pollution and other environmental problems.					
8	I have convinced members of my association to produce only those products which are less harmful to the environment.					
	Green Pricing					
9.	Additional or extra charges are attached to our environmentally responsible products in exchange for the value added.					
10.	My company has produced products that were more expensive but saved energy.					
11.	Most of our customers are contended with the additional charges placed on our green products due to the value added.					
12.	Some of our customers complaint over the additional charges placed on our green products.					
13.	Many of our customers have switched from our green products to alternate products due to the high prices of our green products.					
14.	Despite the high prices of our green products, customers who are environmental concerns still patronize our products.					
	Green Promotion					
15.	My company's promotional activities have minimum negative impact on the environment.					
16.	My company aimed at eliminating unwholesome promotional activities and stress on environmental sustainability and good quality of life.					
17.	My company does not carry our conventional advertisements in the form of bill boards, banners, posters and handbills pasted on popular structures such as bridges, flyovers and buildings in areas of high traffic due to environmental reasons.					
18.	I believe that pasting handbills and posters on popular structures such as bridges, flyovers and buildings in areas of high traffic could be very untidy for environmental sustainability.					

19.	The main reason why our company does not advertise in banners, handbills and posters pasted on popular structures is because when these materials are carried away by wind and dumped in filthy and muddy water on the road, it causes environmental pollution.					
	Green Distribution					
20.	My company's distribution system promotes environmental sustainability.					
21.	My company has environmental issue in mind while selecting its vehicles and trucks to distribute its products.					
22.	My company does not use smoking vehicles and trucks on the highways in distributing its products.					
23.	Smoking vehicles and trucks on our highways used in product distribution can cause different forms of pollution to the environment and unhealthy living to the people.					
24.	My company ensures that its vehicles and trucks used in the distribution of its products are in proper shape to avoid breakdown of vehicles.					
25.	The breakdown of vehicles while transporting goods causes environmental concerns.					
	Sustainability					
26.	I feel that it is important for us to preserve our natural resources and environment in the course of doing business.					
27.	I intend to maintain and preserve our natural resources and environment from all forms of pollution.					
28.	Keeping our environment sustainable requires the practice of green marketing initiatives.					
29.	I think that every company should have an environmental policy to ensure environmental sustainability.					
30.	I think every company should have an environmental management system.					
31.	Continuing economic growth is compatible with environmental sustainability.					

For Consumers Only

S/N	Sustainable Consumption	5 SA	4 A	3 U	2 D	1 SD
1.	Environmental protection is important to me when making purchases.					
2.	I have switched products for environmental reasons.					
3.	I buy products which are less harmful to the environment.					
4.	I always purchase products which contribute the least amount of pollution.					
5.	I buy products packaged in reusable containers.					
6.	I usually buy energy saving light bulbs despite the fact that they are more expensive compared to other bulbs.					
7.	I will continue to buy green products even if I have to pay more.					
8.	It is my firm belief that my purchasing behavior of green products can alleviate environmental problems.					
9.	It is my responsibility to promote green production by buying only green products.					
10.	I would convince members of my family and friends not to buy products which are harmful to the environment.					

APPENDIX II

RELIABILITY COEFFICIENT OF THE INSTRUMENT

n = 20

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

The raw score method

$$r = \frac{20 \times 85777 - 1269 \times 1342}{\sqrt{[20 \times 81318 - (1269)^2][20 \times 90604 - (1342)^2]}}$$

$$r = \frac{1715540 - 1269 \times 1342}{\sqrt{[1626360 - 1610361][1812080 - 1800964]}}$$

$$r = \frac{12542}{\sqrt{[15999][11116]}}$$

$$r = \frac{12542}{\sqrt{[177844884]}}$$

$$r = \frac{12542}{13335.85}$$

r = 0.9405

r = 0.94

Using Spearman –Brown formula to obtain the reliability coefficient.

$$ {}^{r}n = \frac{nr}{1 + (n- 1)r} $$

$$ {}^{r}n = \frac{2r}{1 + r} $$

$$ = \frac{2(0.94)}{1 + 0.94} $$

$$ = \frac{1.88}{1.94} $$

$$ = 0.9641 $$

${}^{r}n = 0.96$

APPENDIX III

COMPANIES STUDIED

AKWA IBOM STATE

Companies	Address	Products
Siba Food and Confectionary Ltd.	No 2 Industrial Road, Utu Ikot Ekpene, Akwa Ibom State.	Bottled Water
Sandee Resources Ltd.	No 1 Iboko Street,Uyo, Akwa Ibom State.	Paint Plastic Containers
Ebuka Ventures.	No 45 Ikot Ndem, Uyo, Akwa Ibom State.	Kitchen Utensil, Food Flask, Kettle Plastics
Plasto Crow Nigeria Ltd.	Industrial Layout AK/ Nung Udoe Road, Uyo, Akwa Ibom State.	Plastic Containers
Sir Joe Plastic Ltd.	Idi Oron Ibiono Ibom, Akwa Ibom State.	Plastic Cans
Complete Plastics	70/71 Udotung Ubo Street, Uyo, Akwa Ibom State.	Plastic Containers and Cans
Essiet Brothers.	No 16, Chubb Road, AKs Ikot Ekpene, Akwa Ibom State.	Plastic Containers
Ifendy Global Plastics	Plot 3, Afaha Ikot Obio Nkan Road, Uyo, Akwa Ibom State.	Plastic food containers & Lids suitable for packaging all kind of foods and products
Bunica Plastics	Ikot Obioro, Okon Eket L.G.A., Akwa Ibom State.	Polythene Packaging Products and Packing Bags

BAYELSA STATE

Companies	Address	Products
J.U. & Sons Enterprise Nig. Ltd	Swali Market, Bayelsa State	Kitchen Utensils, Aluminum Kettle, Aluminum Pot, Children Food Flask
Cway Food and Beverage Company Ltd.	Okaka Estate, Yenagoa, Bayelsa State.	Bottled Water and Beverage Products
Grand Petro-Allied Industries Ltd.	Plot 5, Aka Estate, Aka-Ama, P.O. Box 259, Yenagoa, Bayelsa State.	Industrial Plastics, Rubber and Foam
AOA Waterways Ventures	Idema Yunigwa Road, Yenagoa, Bayelsa State.	Beverage and Bottled Water
AT & L Limited	No 3 Ovom, Yenagoa, Bayelsa State.	Timber and Wood Products
Bobo Table Water	Kolokuma/Opkuma, Bayelsa State	Bottled and Sachet Water
Progress Wood & Medal Ind. Ltd.	Plot 7, Aka Estate, Yenagoa, Bayelsa State	Wood and Metal Products
Cusson Enterprise	Ebisam Road, Akenfa, Yenagoa, Bayelsa State	Bottled Water and Sachet Water
Thankgodiniye	5 Market Road, Swali Town, Brass, Yenagoa, Bayelsa State.	Bottled Water
F. Nelson SSD	Port Harcourt Expressway, Kalama, Yenagoa, Bayelsa State	Beverage Products and Bottled Water

CROSS RIVER STATE

Companies	Address	Products
Offbam Plastics Ltd.	N.E.P.A. Road, Ikot Ansa, Calabar, Cross River State.	Plastic Containers and Cans
Doibplast Investments Company Limited	No. 2, Ishie Street, Calabar, Cross River State.	Bottled Water
Archie O. Ventures Nigeria Ltd.	No. 135, Goldie Street, Calabar, Cross River State.	Bottled Water
Excel Plastic Conglomerates Ltd	Km4, Murtala Muhammed Highway, Ikot-Ishie Calabar, Cross Rivers State.	Plastic Containers and Cans
Ibor Investment	4, Netico Road, Calabar, Cross River State.	Beverage Products and Bottled Water
Anifah Enterprises Nigeria Limited	9, Oma Street, Calabar, Cross River State	Bottled and Sachet Water
Southern Foods and Beverage Limited	Plot A64/65, Calabar Free Trade Zone, Calabar, Cross River State	Bottled and Sachet Water
Lura Table Water	135 Goldie Street, Calabar, Cross River State.	Bottled and Sachet Water
Magg Endief Enterprises Nigeria Limited	76/78 Ndidem Usang Iso Road, Calabar, Cross River State.	Bottled and Sachet Water
Big Joe Ventures Limited	15, Mutala Road, Calabar, Cross River State.	Bottled Water, Sachet Water, Building and Plumbing Materials
Senco Investment Company Limited	1/2, Etim Edem Street, Calabar, Cross River State.	Bottled Water

DELTA STATE

Companies	Address	Products
Delta Glass Company.	Km 17 Patani Road, Ughelli, Delta State	Hollow Glassware
Teki Bottling Company	Km 4 Ekpan Refinery Road, EkpanUvwie, Warri, Delta State	Bottled and Sachet Water
Zenith Multi Dimensions Enterprise	Plot 7 Block V, Phase 4, Core Area, Asaba, Delta State.	Bottled Water
Unity Plastic Conglomerates & Co. Nig. Ltd.	211 Okobi Street, Owa Agbor, Delta State.	Plastic Containers and Cans
The Preswin Nigeria Limited	Plot 10, Ibuzor-Asaba Expressway, Asaba, Delta State.	Bottled and Sachet Water
Vio Interprom Services Limited	Vio Water Close, Warri Delta State	Bottled and Sachet Water
Eastern Metals Limited	Km 16, Asaba-Benin Expressway, Asaba, Delta State.	Metal Products
Andrite Table Water Ltd.	15, Okoligbe Street, Sapele, Delta State.	Bottled and Sachet Water
Jodeck Crushers Interbiz	Km 1, Ekiugbo-Patani Expressway, Ughelli, Delta State.	Plastic Containers and Cans.

EDO STATE

Companies	Address	Products
Ecofuture Nigeria Ltd.	Km 8 Sapele Road, Opposite City-Gate Junction, Benin- City, Edo State.	Papers, Glass, Plastics and Metal Products
Obefe International Limited.	8 Obefe Avenue, Benin-City, Oredo, Edo State.	Plastic Cans
Tobor's Enterprises Nigeria Limited	5, Esogban Street, Benin City, Ikpoba Okha, Edo State.	Bottled and Sachet Water
Chrisbride Ventures	30 Lagos Street, Benin-City, Oredo, Edo State.	Plastic Cans and Containers
Genegate Resources	3, Aifuwa Street, Ekosodin Benin City, Edo State.	Bottled and Sachet Water
A.A. Nwakuba & Sons Enterprises	31, Lagos Street, Benin- City, Oredo, Edo State.	Plastic Bottles.
Innocent & Sons Company Limited	7, Dadua Street, Benin City, Edo State	Bottled Water
Faith Plastic Ventures	2, Mela Motel Road, Benin- City, Egor, Edo State	Plastic Containers
The Freedom Group Limited	51, Akenzua Street, Benin City, Edo State.	Bottled Water
Norte Dame Industrial Company Ltd.	Km 10, Benin-Asaba Expressway, Uhunmwonde, Edo State.	Bottled and Sachet Water

RIVERS STATE

Companies	Address	Products
Hoison Energy & Resources Service Ltd.	Trans Amadi Industrial Layout, Port Harcourt, Rivers State	Polypro ethylene Plastics and High Density Polypro ethylene Waste Bags
West African Glass Ind. Ltd.	Plot 134 Trans Amadi Industrial Layout, Port Harcourt, Rivers State	Hollow Glass Containers
Polo Packaging Ind. Ltd.	Plot 84, Trans Amadi Industrial Layout, Port Harcourt, Rivers State.	Polypropylene Woven Bags & Packaging Materials.
Sun Flower Manufacturing Company Ltd.	Plot 70, Trans Amadi Industrial Layout, Port Harcourt, Rivers State.	Plastic Bags, Containers and Household Utensils.
Saroboms Enterprises Nigeria	No 4 Hall Avenue, Mile 4, Rumueme, Port Harcourt, Rivers State	Plastic Containers
Belhope Plastics Industries Ltd.	Km 17, Port Harcourt-Aba Road, Port Harcourt, Rivers State	Plastic Containers
Nampet Ventures Limited.	82 Enekha Road, Rumuduru, Port Harcourt, Rivers State.	Pet Plastic Bottles, High Density Polyethylene Bottle Caps, Bottling of Distilled Water and the Recycling of Plastic Bottles.
Zenith Plastics Conglomerates Ltd.	Plot 34, Trans Amadi Industrial Layout, Port Harcourt, Rivers State.	Plastic Bottles and Containers
Metal & Plastic Industries (Nig.) Ltd.	Plot 37, Trans Amadi Industrial Layout, Port Harcourt, Rivers State	Metal Products and Plastic Cans
General Plastic Nigeria Ltd	24 Kaduna Street,, Port Harcourt, Rivers State	Beverage Products and Bottled Water